F. RICHARD
WILTON
CONTRACTOR

HAZARD COMUNICATION SAFETY PROGRAM

SAFETY DATA SHEET (SDS)

F. Richard Wilton Jr. Inc.

Hazard Communication Program

Safety Data Sheets (SDS)

F. Richard Wilton Jr. Inc

Table of Contents

Purpose, Scope & Responsibilities

F Richard Wilton Safety Rules

F Richard Wilton Hazard Communication Plan

Safety Data Sheet (SDS) - Chemical List by Company

Safety Data Sheet (SDS) – Individual SDS by Company

F. Richard Wilton Jr. Inc.

PURPOSE

This policy is intended to provide directions and assistance for management and employees who need to be aware of potential hazards associated with their work at F. Richard Wilton Jr., Inc. The standard is based on the premise that employees have the right and need to know all hazards associated with chemicals they may be exposed to during their daily work activities. Additionally, it is designed to give employees information on how to protect themselves from these potential hazards.

This program has been developed to ensure all employees understand where to obtain information about the chemicals they work with, what this information means and how to prevent injury and protect themselves.

SCOPE

This program is designed to provide all employees with guidance on how to use potentially hazards chemicals in the work environment.

RESPONSIBILITIES

It is imperative that management and all employees understand their individual responsibility and carry them out to ensure F. Richard Wilton Jr. Inc. maintains a safety workplace. In doing so, communication is a vital part for all safety practice to be sustained. A successful Safety Program requires commitment and communication at all levels.

The use of chemicals needs to be planned into all work activities and communicated with employees during the Pre-Job Briefing for each task.

Often the first person who is in the position to identify a potential hazard is the employee working in the "field". It is critical that all employees pay attention to potential workplace hazards, including potential chemical hazards, and notify their supervisor when such rise occurs.

It is essential that all employees have access to Safety Data Sheets (SDS) for the chemicals they are working with and know where to find the SDS for each product. In addition, all employees must know how to effectively use the SDS to ensure if an incident occurs, proper measures are taken to care for injured personnel.

Safety is of paramount importance and everyone's responsibility.

F. RICHARD WILTON SAFETY RULES

1. All unsafe acts and conditions are to be reported to your foreman **immediately.**

2. **All injuries, vehicle accidents or property damage, regardless of how minor, must be reported to your foreman immediately, if possible, but in no case later than the end of the work shift the day of the occurrence.**

3. All forms of weapons and firearms are not allowed on ANY F. Richard Wilton Jr., Inc. jobsites. Strict adherence to this policy is required. The Police will be notified to remove any individual who is in violation of this policy or poses a threat to anyone's wellbeing. Any violation of this policy will result in disciplinary action up to and including termination or being barred from jobsites.

4. All forms of horseplay are strictly prohibited. Employees engaged in physical confrontations, threats of violence or threats of property damage are subject to disciplinary action up to and including termination or be barred from jobsites.

5. The use or possession of intoxicants or illegal drugs on company property or jobsites is **forbidden**.

6. When it becomes necessary for any employee to use prescription medication during working hours, the employee must inform his/her supervisor.

7. The company must notify employees who the on-site supervisor is for each project. The employees shall advise the supervisor when they arrive at the new site.

8. **ALL EMPLOYEES** will make themselves aware of the location of the OSHA Safety and Health Poster, emergency telephone number, hazard communication program and the HAZCOM Program Poster, the SDS Book and the location of the first aid supplies.

9. Approved hard hats shall always be always worn while on the jobsite.

10. ANSI approved eye protection shall be worn on the jobsite.

11. Cut resistant gloves shall be worn while handling material and using sharp objects.

12. ANSI approved industrial type work boots shall be always worn on the job site. Open toe shoes or tennis shoes are prohibited.

13. Respiratory equipment will be worn when required by Safety Data Sheet (SDS) for chemical use.

14. Tampering with or unauthorized use of fire extinguishers is **strictly prohibited**.

15. Employees are required to inspect all tools and equipment, i.e., ladders, scaffolds, saws, hand tools, etc., prior to use each day.

16. Defective tools and equipment shall be removed from service immediately. Defective Equipment Tags will be attached to all defective tools and equipment and returned to the warehouse.

17. Construction equipment, i.e. aerial lifts, scaffolding, etc., must not be operated within 10 feet of overhead high voltage power lines.

18. Operators must be in driver's seat before starting equipment.

19. Operators getting on or off equipment while equipment is in motion is absolutely prohibited.

20. Employees are **not** to ride as passengers on construction equipment.

21. The operation of any equipment or power tool **without proper authorization is prohibited**.

22. Employees are not allowed to work under a swinging or suspended load.

23. Only **CERTIFIED OPERATORS** are permitted to operate any type of crane.

24. Cranes or boom lifts will not be operated unless the swing radius of the super structure is properly barricaded.

25. Cranes or boom lifts will not be operated unless outriggers rest on adequate cribbing or other firm, secure footing.

26. Slings, chokers, etc. will be inspected before each lift. Those that are worn, frayed, kinked or otherwise damaged will be removed from service immediately.

27. The operation of machinery, power tools or construction equipment without proper training and instruction is prohibited.

28. Good housekeeping practices are required at all times. All debris and waste materials shall be removed as the work progresses but in no case later than the end of each shift.

29. All material and equipment shall be neatly stored out of all walkways and stairways. Extension cords, hoses, etc. shall be kept out of all walkways and stairways.

30. All scaffolding shall be inspected by the **"DESIGNATED COMPETENT PERSON"** prior to the start of work each day. The results of the inspection shall be noted on the Daily

Supervisor Inspection Sheet. Green Scaffold Tags shall be placed on all scaffolds that are safe to use.

31. Scaffolds will be erected on sound rigid footings. Unstable objects, such as barrels, boxes, loose bricks or concrete blocks, will not be used to support scaffolds or planks.

32. Employees shall not work on scaffolds over 10 feet in height that are not provided with standard guardrails or proper fall arrest systems (top rail, mid rail and toeboard) or are not built according to scaffold erection guidelines.

33. Employees shall not work on scaffolds **4'-10"** in height, having a minimum horizontal dimension in either direction, of less than **45"** that are not provided with standard guardrails. Narrow type scaffolds, i.e. Baker and Perry-type scaffolds, are examples that fall under this requirement.

34. A full body harness with lanyards will be used on scaffolds when guardrails cannot be installed.

35. Damaged, bent, incomplete or otherwise defective scaffold members shall not be used.

36. Employees **shall not** climb scaffold frames or braces unless they are designed for this purpose.

37. All scaffolds shall be provided with properly secured access ladders or steps.

38. Regardless of footing, all tubular scaffold frames shall be set on screw jacks, base plates, or concrete slabs, when permitted.

39. Scaffold planks shall extend over their end supports by no less than **6"** and no more than **12".**

40. Employees shall not work on freestanding manually propelled mobile scaffolds that exceed two times the scaffold's minimum base dimension.

41. Employees shall ensure that the wheels on manually propelled mobile scaffolds are locked before climbing the access ladder.

42. Employees **shall not** work on manually propelled mobile scaffolds that are not completely decked full width of frame.

43. Employees **shall not** work on tubular or mobile scaffolds that are not completely braced, including diagonal braces.

44. Tubular welded frame scaffolds must be secured to the structure at each end and at intervals not to exceed **30'** horizontally, regardless of height.

45. DO NOT USE ladders, buckets, blocks, crates, or other makeshift devices to increase working height of a scaffold or other work surfaces. DO NOT stand on or place a plank on guardrails to increase working height of a scaffold.

46. Only industrial **Type 1A** or grater graded ladders and step stools shall be purchased and used on any project.

47. Prior to each use, always inspect any ladder for damage, such as bent rungs, broken parts or missing decals. If any are present, place **Defective Equipment Tag** on ladder and remove it from work area.

48. Prior to ascending or descending extension ladders, the employee shall ensure that the ladder is secured against a displacement and extends at least **36"** above the landing when using as an access ladder.

49. When ascending or descending a ladder, the user shall face the ladder and always maintain 3 points of contact with the ladder.

50. Each employee shall use at least one hand to grasp the ladder when progressing up and/or down the ladder.

51. Employees shall not carry any object or load that could cause the employee to lose balance and fall.

52. Ladders shall not be used in a horizontal position as platforms, runways, scaffolds, or for other than their intended purpose.

53. Ladders shall not be used to support scaffold boards.

54. Metal ladders shall not be used where they may contact energized electrical conductors.

55. Ladders shall not be placed in passageways, doorways, driveways, or any location where they may be displaced by other work, unless protected by barricades or guards.

56. Portable ladders shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.

57. The areas around the top and bottom of the ladder must be kept clear of debris, cords, welding leads, and other tripping hazards.

58. Portable ladder feet must be placed on a firm, substantial base.

59. Wooden ladders are prohibited.

60. Only employees who have been trained and certified in the operation of the powder actuated tool will be allowed to operate such tools.

61. Employees **will not** remove guards from tools or equipment or make safety devices inoperative.

62. Employees **will not** operate equipment that has had guards removed or other safety devices made inoperative. Place a **Defective Equipment Tag** on equipment and remove it from site.

63. Electrical cords with broken insulation **will not be used.** Place a **Defective Equipment Tag** on equipment and remove it from site.

64. Employees shall not use temporary or permanent power without GFCI protection.

65. Three-wire electrical cords without a ground pin **will not be used.** Place a **Defective Equipment Tag** on equipment and remove it from site.

66. Ungrounded electrical tools will not be used, including double-insulated tools.

67. Electric cords must not be run through doors, on steps, roadways, etc. without protection against damage to insulation.

68. Guards **will not be removed** from temporary lights. When it becomes necessary to remove a guard from a temporary light to replace a bulb, the guard **must be replaced.**

69. Fire extinguishers will be obtained prior to starting welding or open flame operations and will be kept in the area of such operations.

70. Signs prohibiting smoking or open flames will be posted on or near all fuel tanks, at refueling areas, and flammable liquid storage areas.

71. A 20-B.C. fire extinguisher will be located within 75' of each fuel tank or flammable liquid storage area.

72. Employees will abide by all signs and posters and will not violate any barricade.

73. Fall protection must be used when there is a potential fall of 6' or greater. This can be accomplished by using a complete guardrail system or a Personal Fall Arrest System (PFAS).

74. Employees shall not work on roofs or any other similar structure without proper fall protection.

75. All F. Richard Wilton Jr., Inc. employees and subcontractors are required to don PFAS before using ANY type of aerial lift. While aerial lift is in use, all workers shall maintain 100% fall protection while in the lift.

76. All employees and/or contractor personnel must have a valid driver's license to operate a company vehicle.

77. All driving laws and/or regulations must be followed.

78. Drivers are expected to always drive defensively.

79. Seat belts shall always be worn by **ALL** occupants of a company vehicle without exception. The driver is responsible for ensuring that all occupants fasten their seatbelt prior to operating the vehicle.

80. Texting while driving is prohibited.

81. Cell phones shall only be used on "handsfree" while operating a company vehicle.

Table of Contents

Table of Contents 1

Introduction 2

Applicability 2

Responsibility 2

Safety Data Sheets 2

New Products 4

SDS Access 4

Container Labeling 5
- Label Requirements 5
- Color/Number Labels 6
- NFPA Type Labels 7
- Pictograms 7

Employee Training 9

Contractors 10

Emergency Contacts 10

Appendix I: Pictograms

Appendix II: Common chemicals that may be found in the work place

Introduction

This plan, written for F. Richard Wilton Inc., and will serve as the formal document for compliance with the U.S. Occupational Safety and Health (OSHA) "Hazard Communication" standard 29 Code of Federal Regulations (CFR) Section 1910.1200. This plan will address standards for communicating the hazards of chemicals to the employees who work for F. Richard Wilton Inc. (Wilton)

Applicability

The procedures in this plan apply to all products that may impact the health of employees during the performance of their duties. All employees must be familiar with the information in this plan and must strictly adhere to the procedures as described herein.

All definitions and terms used throughout this document will be the same as described in the 29 CFR 1910.1200.

Responsibility

Management – The management team has the ultimate responsibility for compliance with all regulatory requirements, including the contents of this document.

Safety Manager – The Safety Manger is responsible for implementation of this plan and to provide management with accurate and up to date information concerning compliance with provisions of the "Hazard Communication" standard. The Safety Manager will provide procedures/training for employees and provide labels for products as required.

Employees – Employees are responsible for proper use of any product and knowledge of its attendant health hazards. In addition, employees are responsible for familiarity with these procedures and how to access the system in order to obtain a Safety Data Sheet.

Safety Data Sheets

Safety Data Sheets (SDS) are documents that describe a product and the types of hazards both to humans and the environment. Safety Data Sheets have a specified 16-section format that includes the following sections:

Section 1, Identification includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures includes important symptoms/ effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

Section 8, Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*

Section 13, Disposal considerations*

Section 14, Transport information*

Section 15, Regulatory information*

Section 16, Other information, includes the date of preparation or last revision.

**Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29 CFR 1910.1200(g)(2)).*

Obtaining SDS

Chemical manufacturers and importers are required to obtain or develop an SDS for each hazardous chemical they produce or import. Distributors are responsible for ensuring that their customers are provided a copy of these SDSs. Employers must have an SDS for each hazardous chemical they use. Wilton maintains a list of all products in use throughout the

company. In the event SDS's are not available employees should contact their supervisors or Safety Manager.

New and/or Revised (M)SDS

All new and revised SDS shall be forwarded to the appropriate individual within the group for inclusion in the list of SDS's.

SDS Access

Employees must be able to access SDS's when required, 24 hours a day, seven days a week. Lists of SDS's must be available at each project.

Container Labeling

Manufacturers, importers, and distributors must label all containers of hazardous chemicals. Containers include items such as bags, barrels, bottles, boxes, cans, cylinders, drums, and storage tanks. The only exception to the labeling rules is pipes and other fixed assets such as tanks, storage rooms, etc.

Wilton will continue to use NFPA 704 for labeling format for fixed assets such as piping, tanks, storage rooms, etc. NFPA labels inform Fire and Rescue services of hazards when responding to emergencies.

All containers must be checked when they are received to make sure that they are labeled properly. The labels on a container when they arrive must stay on the container and be readable as long as the container is in use. If an employee sees a container possessing any amount of product and is not labeled or the label is not legible, contact a supervisor or Safety Manager The supervisor or Safety Manager will obtain a label based on the SDS to place on the unlabeled container.

Label Requirements

The HCS requires the following elements on labels of hazardous chemicals:

- **Name, Address and Telephone Number** of the chemical manufacturer, importer or other responsible party.
- **Product Identifier** is how the hazardous chemical is identified. This can be (but is not limited to) the chemical name, code number or batch number. The manufacturer, importer or distributor can decide the appropriate product identifier. The same product identifier must be both on the label and in section 1 of the SDS.
- **Signal Words** are used to indicate the relative level of severity of the hazard and alert the reader to a potential hazard on the label. There are only two words used as signal words, "Danger" and "Warning." Within a specific hazard class, "Danger" is used for the

more severe hazards and "Warning" is used for the less severe hazards. There will only be one signal word on the label no matter how many hazards a chemical may have. If one of the hazards warrants a "Danger" signal word and another warrants the signal word "Warning," then only "Danger" should appear on the label.

- **Hazard Statements** describe the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard. For example: "Causes damage to kidneys through prolonged or repeated exposure when absorbed through the skin." All of the applicable hazard statements must appear on the label. Hazard statements may be combined where appropriate to reduce redundancies and improve readability. The hazard statements are specific to the hazard classification categories, and chemical users should always see the same statement for the same hazards no matter what the chemical is or who produces it.
- **Precautionary Statements** describe recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to the hazardous chemical or improper storage or handling.
- **Supplementary Information.** The label producer may provide additional instructions or information that it deems helpful.

Color/Number Labels

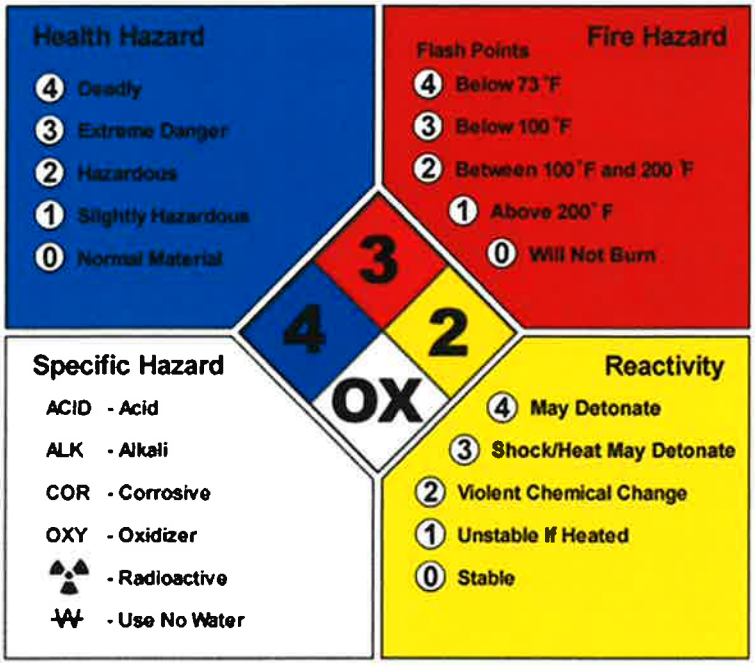
The NFPA (National Fire Protection Association) system uses the diamond & color on the label to represents a different hazard:

Blue = Health hazard
Red = Fire hazard
Yellow = Reactivity hazard
White = special hazard (NFPA) or Personal Protection such as PPE.

The system uses numbers to show the degree of hazard from 0 – 4 (the higher the number, the higher the degree of hazard) with 0 meaning minimum hazard.

0 = Minimum hazard
1 = Slight hazard
2 = Moderate hazard
3 = Serious hazard
4 = Severe hazard

NFPA Type labels:



The example diamond shape label above indicates the following:

- The color **BLUE** with the **Number 4** indicates that there is an extreme health hazard associated with this product.
- The section of the diamond colored **RED** with the **Number 3** indicates a serious fire hazard as it has a flash point below 100°F.
- The section of the diamond colored **Yellow** with the **Number 2** indicates the potential for a reactivity hazard of a Violent Chemical Change.
- The **white** section of the diamond displays a specific hazard. This shows that this product is a powerful oxidizer. **OX = oxidizer**, ACID = acid, ALK = Alkali (base), COR = Corrosive, W = Use no water.

GHS Pictograms

Pictograms are a composition that may include a symbol plus other elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight mandatory pictograms are designated under this standard for application to a hazard category. A 9th pictogram dealing with the environment has not been mandated by OSHA; however employees should be aware of it as it may be on some chemicals. ***See Appendix II.***

Comparison of NFPA and GHS Labels

The chart below compares the difference between the NFPA labeling and GHS labeling.

	NFPA 704	GHS Labels
Purpose	For fire or spill response or emergency planning	Informs workers about workplace chemical hazards for normal conditions
Numbering System	0-least hazardous, 4-most hazardous. Uses symbols like ~~W~~ in the Special Hazard area to denote information	1-most severe, 5-least hazardous. No numbers on label
Health hazards on labels	Acute (short term) health hazards ONLY Informs of typical emergency responses	Both Acute and Chronic (long term) health hazards Informs of effect from daily use
Flammability and/or physical hazards	Divides fire and instability in two areas Flammability in Red section Instability in Yellow section	Broad range of physical hazards including explosives, flammables, combustible dusts, etc
Other	The hazard category numbers in section 2 of new SDS are NOT to be used to fill in diamond sections	If NFPA information is not provided on SDS (not required) criteria will be determined referencing NFPA tables

A key difference between the two labeling system involves the numbering system to identify the hazards of a chemical. The chart below shows the numbering system between the two labeling systems. Note the inverse order of numbering system and the severity of the hazard.

	NFPA 704	HazCom 2012
Purpose	Provides basic information for emergency personnel responding to a fire or spill and those planning for emergency response.	Informs workers about the hazards of chemicals in workplace under normal conditions of use and foreseeable emergencies.
Number System: NFPA Rating and OSHA's Classification System	0-4 0-least hazardous 4-most hazardous	1-4 1-most severe hazard 4-least severe hazard • The Hazard category numbers are NOT required to be on labels but are required on SDSs in Section 2. • Numbers are used to CLASSIFY hazards to determine what label information is required.

Employee Training

Employees will receive information and training on hazardous chemicals used in their work area at the time of initial assignment and whenever a new physical or health hazard related to a chemical product is introduced into the work place. In addition, annual refresher training will be initiated. Training will include:

1. An overview or the requirements of 29 CFR 1910.1200, "Hazard Communication";
2. The location and availability of the written Hazard Communication Program.
3. A description of specific operations that require the use of hazardous chemicals;
4. A description of the health and physical hazards associated with hazardous chemicals used in the work area;
5. Methods/Observations that can be used to detect the presence or release of a hazardous chemical;
6. A description of the methods employed to ensure work with hazardous chemicals can be accomplished safely;
7. Requirements for performing hazardous non-routine task, such as Confined Spaces, (*pre-job briefings must be conducted to inform employees about the hazardous chemicals to which they might be exposed while performing non-routine task and the proper pre-cautions to take to reduce or avoid the risk of exposure.)*
8. How to obtain copies of a SDS electronically, or know who to contact if electronic copies are not available.
9. A summary of the written hazard communication program.

The training will be documented by recording the employee's printed name and signature, the trainer's printed name and signature and the date the training was accomplished. The training material and records are stored electronically.

Contractors

Sub-contractors working on Wilton property and/or project will be provided with the following information:

1. How to gain access to SDS documents via the Wilton employee overseeing their work.
2. A description of measures in place to protect employees from chemical hazards.
3. An explanation of the labeling system used in the work place.
4. Areas that may require performing hazardous non-routine task.
5. A copy of Dominion's written hazard communication program.

Contractors working on Wilton property and/or project must be able to provide the employee overseeing their work with the following information:

1. A copy of their written Hazard Communication Program.
2. Copies of SDS's for chemicals used while performing their work on the property.
3. A description of measures in place to protect employees from chemical hazards.
4. An explanation of their container labeling methods for chemicals used on the property while performing their work.

Wilton reserves the right to stop contractor's work if it is in violation of the Hazard Communication Program.

Emergency Contacts

Spills - Take immediate steps to safely and quickly contain the release.

- Notify your supervisor. If the supervisor cannot be reached, immediately notify the appropriate environmental contact.

Primary contact: _____

_____

Secondary contact: _____

_____

- The environmental contact should be provided as much information as possible without delay. Including:
    - Source of spill or release
    - Date and time of incident
    - Material spilled or released (provide SDS information for material, if available)
    - Amount spilled or released
    - Personnel at the scene
    - Actions initiated
    - Container type
    - Stream or body of water impacted by spill and amount reaching water
- After receiving notification of release, management will:
    - Determine if the release is reportable to regulatory agencies, make required regulatory notifications and file required reports.
    - Provide guidance concerning additional containment or cleanup activities, if necessary.
- After all information has been secured and the source of the spill contained, Operations should complete a detail report about the release.

Appendix I

HCS Pictograms and Hazards

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

- Gases Under Pressure

Corrosion

- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment (Non-Mandatory)

- Aquatic Toxicity

Skull and Crossbones

- Acute Toxicity (fatal or toxic)

Appendix III

SDS Chemical Inventory – F. Richard Wilton Inc.

Vendor/Category	Item

Safety Data Sheet - Chemical List by Company

PRODUCT NAME	PRODUCT SDS	PRODUCT TYPE
BP Oil		
BP DIESEL	SDS # 0000003079	Oily liquid
Clark Dietrich Building Systems		
Coated Steel Sheet	SDS # NA	Steel Sheet
Delta Adsorbents		
Demandit Smooth/Demandit Sanded	SDS# NA	Acrylic Coats
Dryvit		
Sandblast Pastel Base	SDS# NA	Paste
Sandpebble Pastel Base	SDS# NA	Paste
Freestyle, Fine, Smooth	SDS# NA	Paste
Sandblast -Si, Sandblast NTX	SDS# NA	Paste
Sandpebble Fine Plaster Base	SDS# NA	Paste
Quarzputz HDP	SDS# NA	Paste
Dupont		
Betafuse 656	SDS # NA	Adhesives
Georgia-Pacific Gypsum LLC		
Glass Mat Faced Gypsum Panels	SDS # GP-71C	Gypsum Panels
Grabber Construction Products		
Grabber Screws, Nails and Staplers	SDS # NA	Screws, Nails, Staples
Graymont		
Dolomitic Hydrated Lime	SDS # NA	Lime mixture or solid
Gold Bond Building Products		
Gold Bond Shaftliner XP	SDS # SDS01002	Gypsum Board
Gold Bond XP Gypsum Board	SDS #SDS01003	Gypsum Board
Gold Bond eXP Shaftiner	SDS #SDS01007	Gypsum Board
Gold Bond Conventional Plaster	SDS #01307	Plasters

REV:4/6/2026

Gold Bond Gypsum Boards	SDS #01501	Gypsum Board
Imperial Manufacturing Group INC,		
Silicone Sealant – Colors	SDS # NA	Sealant/ Adhesive
Johnson Abrasives		
Smooth-Kut	SDS #152D	Abrasive Mixture
Lab Alley Essential Chemicals		
Acetone – CAS	SDS# 67-64-1	Lab chemical
Larson Products Corp.		
Plaster-Weld	SDS # NA	Mixtures
Weld-Crete	SDS # NA	Mixtures
National Gypsum		
XP Gypsum Board	SDS # GB-1003	Gypsum Board
Nelco Worldwide		
Lead Products	SDS # NA	Lead – sheet/massive form
PROFORM		
Joint Treatment Products & Ready Mix Joint Compound	SDS # SDS05002	Joint, Finishing Compound
Johns Manville Company		
Formaldehyde-Free Fiberglass Insulation	SDS # 200000002059	Thermal/acoustic Insulation
TRYMER Rigid Polyisocyanurate Insulation	SDS # NA	Thermal Insulation
Polytek Development Company		
Poly GlassRub 50 Clear Liquid Rubber	SDS # NA	Casting/Mold Rubber
Quikrete Stucco		
Scratch and Brown Based Coat Stucco	SDS# NA	Stucco
Ramset S		
Powder Actuated & Gas Fasteners	SDS # NA	Concrete Fastner
Red Devil		
Silicone Sealant – Acetoxy Cure	SDS # RD-0081	Silicone Sealant
SUNOCO		
SUN ULTRA 93N 10% Ethanol	SDS# NA	Motor Fuel

REV:4/6/2026

Tremco		
Genesis DM	SDS# 301Ds 501	Adhesive and Base coat
United States Gypsum Company		
DUROCK Cement Board	SDS # 14000010001	Cement Board
RED TOPS Gauging Plaster	SDS # 53000010008	Plaster – Perlite
RED TOPS Gauging Plaster – Slow Set	SDS # 530000100010	Plaster
STRUCTO-LITE Basecoat Plaster	SDS # 53000010015	Plaster
STRUCTO-BASE Gypsum Plaster	SDS # 53000010023	Plaster
SHEETROCK Brand Gypsum Panels	SDS # 54000000001	Gypsum Panels
SHEETROCK Brand FIRECODE Core	SDS # 54000002001	Gypsum Panels
SHEETROCK Brand AR – FIRECODE Core	SDS # 54000002006	Gypsum Panels
SHEETROCK Brand Mold Tough Liner	SDS # 54000003004	Gypsum Panels
SHEETROCK Brand Glass-Mat Liner	SDS # 54000004001	Gypsum Panels
Sheetrock Brand EcoSmart Firecode X	SDS # 5400000603	Gypsum Panels
SHEETROCK Brand Acoustical Sealant	SDS # 61000040001A	Sealant
SHEETROCK Brand Easy Sand Compound	SDS # 61000030002	Joint Compound/MUD
SHEETROCK Brand All Purpose Joint Compound	SDS # 61000010008	Joint Compound
United States Steel Corp.		
Galvanized (Hot Dipped) Sheet – Carbon Steel	SDS # 1650	Carbon Steel
Galvanized (Hot Dipped) Sheet-High Strength Steel	SDS # 18138	Carbon Steel
VENATOR		
Synthetic Iron Oxide Red 1117	SDS # 400000002716	Coloring agents
Olin Winchester LLC		
Cartridges – for Powder Actuated Tools	SDS # UN0014, UN 0323	Loaded Rounds
Weld-Crete		
Concrete Bonding Agent	SDS# NA	Adhesive

SAFETY DATA SHEET

BP Diesel

Section 1. Identification

Product name	BP Diesel
Product code	0000003079
SDS no.	0000003079
Historic SDS no.	YSUYL
Use of the substance/mixture	Fuel for compression ignition diesel engines. For specific application advice see appropriate Technical Data Sheet or consult our company representative.
Product type	Oily liquid.
Supplier	bp Oil New Zealand Limited Level 2 Stantec Building 105 Carlton Gore Road Newmarket Auckland New Zealand 1023 Phone 0800 800 027 (Monday to Friday, 9am to 5pm) Email: Customerenquiries@se1.bp.com
Emergency telephone number	Tel: 0800 805 111
New Zealand National Poisons Centre	0800 764 766

Section 2. Hazards identification

HSNO Classification	FLAMMABLE LIQUIDS - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

Routes of entry Dermal contact. Eye contact. Inhalation. Ingestion.

GHS label elements

Signal word Danger

Hazard statements

Combustible liquid.
May be fatal if swallowed and enters airways.
Suspected of causing cancer.
Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.
Response	Collect spillage. IF exposed or concerned: Get medical attention. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
Storage	Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 2. Hazards identification

Symbol

Other hazards which do not result in classification

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapour may cause flash fire or explosion.

Section 3. Composition/information on ingredients

Substance/mixture Substance

Complex mixture of middle distillate hydrocarbons, with carbon numbers in C10 to C28 range.

Ingredient name	% (w/w)	CAS number
Fuels, diesel	100	68334-30-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation

If inhaled, remove to fresh air. Get medical attention.

Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Clean shoes thoroughly before reuse. Get medical attention.

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis.
Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Firefighting measures

Extinguishing media

Suitable

In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.

Not suitable

Do not use water jet.

Specific hazards arising from the chemical

Combustible liquid. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Vapours can form explosive mixtures with air. Vapours are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly-grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Liquid will float and may reignite on surface of water.

Hazardous combustion products

Combustion products may include the following:
carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide)

Hazchem code

3Z

Special precautions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other contaminated materials in suitable tanks or containers for recycle, recovery or safe disposal.

Methods and material for containment and cleaning up

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Section 6. Accidental release measures

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilt material and runoff with soil and surface waterways. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Restrict flow velocity according to API 2003 (2008), NFPA 77 (2007), and Laurence Britton, "Avoiding Static Ignition Hazards in Chemical Operations". To reduce potential for static discharge, ensure that all equipment is properly grounded and bonded and meets appropriate electrical classification requirements.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapour mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurised fuel pipes, the vapour or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fuels, diesel	**ACGIH TLV (United States). [Diesel Fuel] Absorbed through skin.** TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hours. Issued/Revised: 1/2007 Form: Inhalable fraction and vapor **ACGIH TLV (United States). Absorbed through skin.** TWA: 100 mg/m³ 8 hours. Issued/Revised: 1/2007 Form: Total hydrocarbons

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.
Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection

Chemical splash goggles.

Hand protection

Wear chemical resistant gloves. Recommended: Nitrile gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.
The filter class must be suitable for the maximum contaminant concentration (gas/ vapour/aerosol/particulates) that may arise when handling the product.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	Oily liquid.
Colour	Clear Colourless. to Amber.
Odour	Diesel fuel
pH	Not applicable. Based on Solubility in Water (Very slightly soluble in water)
Melting point/freezing point	Not available.
Boiling point, initial boiling point, and boiling range	>180°C (>356°F)
Drop Point	Not available.
Flash point	Closed cup: >61.5°C (>142.7°F) [Pensky-Martens]
Auto-ignition temperature	240°C (464°F)
Lower and upper explosion limit/flammability limit	Lower: 0.7% Upper: 5%
Vapour pressure	0.093 kPa (0.7 mm Hg) [20°C (68°F)]
Relative vapour density	>1 [Air = 1]
Density	830 kg/m³ (0.83 g/cm³)

Solubility(ies)

Media	Result
water	Very slightly soluble

Miscible with water	No.
Partition coefficient: n-octanol/water	>3
Viscosity	Kinematic: 2 to 4.5 mm²/s (2 to 4.5 cSt) at 40°C

Particle characteristics

Median particle size	Not applicable.

Section 10. Stability and reactivity

Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation	Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
Ingestion	Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	No specific data.
Ingestion	Adverse symptoms may include the following: nausea or vomiting
Skin contact	No specific data.

Section 11. Toxicological information

Eye contact No specific data.

Acute toxicity

Product/ingredient name	Test	Species	Result	Exposure	Remarks
Fuels, diesel	LC50 Inhalation Dusts and mists	Rat	4.1 mg/l	4 hours	Based on Diesel fuel
	LD50 Dermal	Rabbit	>4300 mg/kg	-	Based on No. 2 Heating Oil.
	LD50 Dermal	Rabbit	>4300 mg/kg	-	Based on Diesel fuel
	LD50 Oral	Rat	17900 mg/kg	-	Based on No. 2 Heating Oil.
	LD50 Oral	Rat	7600 mg/kg	-	Based on Diesel fuel

Conclusion/Summary May be harmful if inhaled.

Irritation/Corrosion

Product/ingredient name	Species	Result	Score	Exposure	Observation	Conc.	Remarks
Fuels, diesel	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	Based on No. 2 Heating Oil.
	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	Based on Diesel fuel
	Rabbit	Skin - Irritation	-	-	-	-	Based on No. 2 Heating Oil.
	Rabbit	Skin - Irritation	-	-	-	-	Based on Diesel fuel

Sensitisation

Product/ingredient name	Route of exposure	Species	Result	Remarks
Fuels, diesel	skin	Guinea pig	Not sensitising	Based on No. 2 Heating Oil.
	skin	Guinea pig	Not sensitising	Based on Diesel fuel

Potential chronic health effects

General Vapour, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer.

Inhalation Vapour, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer. May be harmful by inhalation after often repeated exposure. Vapour, mist or fume may irritate the nose, mouth and respiratory tract.

Ingestion Ingestion of large quantities may cause nausea and diarrhoea. If swallowed, may irritate the mouth, throat and digestive system. If swallowed, may cause abdominal pain, stomach cramps, nausea, vomiting, diarrhoea, dizziness and drowsiness.

Skin contact Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eye contact Vapour, mist or fume may cause eye irritation. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes.

Section 11. Toxicological information

Carcinogenicity Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Carcinogenicity

Product/ingredient name	Test		Species	Result		Exposure
Fuels, diesel	Mouse	Dermal	2 years	Positive - Dermal - Unspecified	-	Based on Heating Oil.

Conclusion/Summary Suspected of causing cancer.

Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Fuels, diesel	OECD 471	Experiment: In vitro Subject: Non-mammalian species	Positive	Based on Diesel fuel
	Equivalent to OECD 476	Experiment: In vitro Subject: Mammalian-Animal Cell: Germ	Negative	Based on Heating Oil.
	not guideline	Experiment: In vivo Subject: Unspecified Cell: Somatic	Negative	Based on Heating Oil.

Conclusion/Summary Not classified. Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Result	Exposure
Fuels, diesel	-	-	Negative	Rat	Dermal	10 days
	-	-	Negative	Rat	Dermal	10 days
	-	-	Negative	Rat	Dermal	20 days

Conclusion/Summary Development: Not classified. Based on available data, the classification criteria are not met.
Fertility: Not classified. Based on available data, the classification criteria are not met.
Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.

Aspiration hazard

Name
Fuels, diesel

Section 12. Ecological information

Ecotoxicity

This product shows a low bioaccumulation potential. Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

Product/ingredient name	Species	Result/Test	Exposure	Effects	Remarks
Fuels, diesel	Micro-organism	EL50 >1000 mg/l Nominal Fresh water	40 hours	growth inhibition	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Micro-organism	NOELR 3.217 mg/l Nominal Fresh water	40 hours	growth inhibition	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Algae	Acute EL50 22 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Daphnia	Acute EL50 210 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Daphnia	Acute EL50 68 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Algae	Acute ErL50 78 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Fish	Acute LL50 65 mg/l Nominal Fresh water	96 hours	Mortality	Based on Diesel fuel
	Fish	Acute LL50 21 mg/l Nominal Fresh water	96 hours	Mortality	Based on Diesel fuel
	Algae	Acute NOELR 10 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Algae	Acute NOELR 1 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Daphnia	Acute NOELR 46 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Daphnia	Chronic NOELR 0.2 mg/l Nominal Fresh water	21 days	Immobilisation	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Fish	Chronic NOEL 0.083 mg/l Nominal Fresh water	14 days	Mortality	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate

Section 12. Ecological information

Fuel

Persistence and degradability

Expected to be biodegradable.

Product/ingredient name	Test	Result	Remarks
Fuels, diesel	OECD 301 F	60 % - Readily - 28 days	Based on Diesel fuel
	OECD 301 F	57.5 % - Not readily - 28 days	Based on Diesel fuel
	Equivalent to EPA OTS 796.3100	35 % - Not readily - 28 days	Based on Gas Oils (petroleum), solvent refined

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Fuels, diesel	>3	-	low

Mobility in soil

Mobility Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.

Soil/water partition coefficient (K_{OC}) Not available.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. Marine pollutant (Diesel)	9	III		Hazchem code 3Z
ADG Class	Not regulated.	-	-	-		Remarks Combustible liquid Class C1 (AS 1940).

Section 14. Transport information

IATA Class	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Fuels, diesel)	9	III		This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
IMDG Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.. Marine pollutant (Fuels, diesel)	9	III		This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. **Emergency schedules** F-A, S-F

PG* : Packing group

Section 15. Regulatory information

New Zealand Regulatory Information

HSNO Approval Number	HSR001441
HSNO Group Standard	Diesel fuel
HSNO Classification	FLAMMABLE LIQUIDS - Category 4 CARCINOGENICITY - Category 2 ASPIRATION HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

Regulation according to other foreign laws

REACH Status	For the REACH status of this product please consult your company contact, as identified in Section 1.
United States inventory (TSCA 8b)	All components are active or exempted.
Australia inventory (AIIC)	All components are listed or exempted.
Canada inventory status	All components are listed or exempted.
China inventory (IECSC)	All components are listed or exempted.
Japan inventory (CSCL)	All components are listed or exempted.
Korea inventory (KECI)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	All components are listed or exempted.

Section 16. Other information

History

Date of issue/Date of revision	12 February 2024
Date of previous issue	No previous validation.
Version	1
Prepared by	Not available.

Section 16. Other information

Key to abbreviations

Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Notice to reader

Indicates information that has changed from previously issued version.

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

Safety Data Sheet (SDS)

ClarkDietrich BUILDING SYSTEMS

Section 1 – Identification

1(a) Product Identifier used on Label: Coated Steel Sheet

1(b) Use/Description: Coated Steel Sheet for thin gauge framing products.

1(d) Products: Cold-Formed Steel Framing components and accessories for drywall, curtain wall and load bearing systems. Also includes metal lath and plaster accessories.

1(d) Synonyms: Hot Band, Cold Rolled, P&O, Galvanized.

1(e) Company Identification and Emergency Contact Information: ClarkDietrich Building Systems

Corporate Office:

9050 Centre Point Drive, Suite 400
West Chester, OH 45069

Phone: 513-870-1100

Fax: 513-870-1300

http://www.clarkdietrich.com/

Manufacturing Locations:

Baltimore, MD	Baytown, TX	Bristol, CT	Dade City, FL
Dallas, TX	Vienna, OH	McDonough, GA	Riverside, CA
Rochelle, IL	Sacramento, CA	Warren, OH	

Section 2 – Hazard(s) Identification

2(a) Classification of the chemical: Coated Steel Sheet is considered an article under Reach regulation (REACH REGULATION (EC) No 1907/2006) and is not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008). However, Coated Steel Sheet is not exempt as an article under OSHA's Hazard Communication Standard (29 CFR 1910.1200) due to its downstream use, thus this product is considered a mixture and a hazardous material. Therefore, the categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev.3" United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information.

2(b) Signal word, hazard statement(s), symbols and precautionary statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Carcinogenicity - 2 Reproductive Toxicity - 2 Single Target Organ Toxicity (STOT) Repeat Exposure -1	**Danger**	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure. Harmful if swallowed. May cause an allergic skin reaction. Harmful in contact with skin. May cause respiratory irritation. Causes eye irritation.
	Acute Toxicity-Oral - 4 Skin Sensitization - 1 STOT Single Exposure - 3		
NA	Eye Irritation-2B		

Precautionary Statement(s):

Prevention	Response	Storage/Disposal
Do not breathe dusts / fume / gas / mist / vapor / spray. Wear protective gloves / protective clothing / eye protection / face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in well ventilated areas. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.	If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. Call a poison center/doctor if you feel unwell.	Dispose of contents in accordance with federal, state and local regulations.

2(c) Hazards not otherwise classified: None Known

2(d) Unknown acute toxicity statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical name, common name (synonyms), CAS number and other identifiers, and concentration:

Chemical Name	Symbol	CAS Number	EC Number	% weight
Iron	Fe	7439-89-6	231-096-4	96.02-97.809
Carbon	C	7440-44-0	231-153-3	0.20-0.25
Manganese	Mn	7439-96-5	231-105-1	1.15-1.65
Phosphorus	P	7723-14-0	231-768-7	0.20-0.23
Sulfur	S	7704-34-9	231-722-6	0.007-0.04
Copper	Cu	7440-50-8	231-159-6	0.20-0.50
Nickel	Ni	7440-02-0	231-111-4	0.20-0.30
Chromium	Cr	7440-47-3	231-157-5	0.15-0.30
Molybdenum	Mo	7439-98-7	231-107-2	0.06-0.16
Vanadium	V	7440-62-2	231-171-1	0.008-0.20
Niobium (Columbium)	Nb	7440-03-1	231-113-5	0.008-0.15
Titanium	Ti	7440-32-6	231-142-3	0.008-0.20

EC - European Community

CAS - Chemical Abstract Service

- All commercial steel products contain small amounts of various elements in addition to those listed. These small quantities are frequently referred to as "trace" or "residual" elements that generally originate in the raw materials used. Steel products may contain the following trace or residual elements including typical percentages for the elements identified: aluminum (0.01-0.5), boron (≤0.005 max, typically 0.001%), calcium (≤ 0.005 max, typically 0.0003%), nitrogen (≤ 0.01 max, typically 0.006%), silicon (≤ 0.03 max, typically 0.002%), and tin (≤ 0.03 max, typically 0.002%). Other trace elements not frequently identified, may include antimony, arsenic, cadmium, cobalt, lead, and zirconium.
- Percentages are expressed as typical ranges or maximum concentrations of trace elements for the purpose of communicating the potential hazards of the finished product. Consult product specifications for specific composition information.
- Product surfaces may be treated with small amounts of corrosion-inhibiting oil that may contain mineral oil or petroleum distillates, or paints, epoxies, laminates, etc., generally applied at the customer's request. Refer to the coating manufacturer's SDS for hazards associated with coatings. Refer to the following table for additional information.

Base Metal Coating (if applicable) [1]

Chemical Name	CAS Number	EC Number	% weight[2]
Galvanized *(Per ASTM A653)*			
Zinc	7440-66-6	231-175-3	99.78-100
Aluminum	7429-90-5	231-072-3	0.22-1.00
Aluminum	7429-90-5	231-072-3	0 - 85
Nickel (Ni) ZnNi EG	7440-02-0	231-111-4	10 - 30
Galvalume[3]	Mixture	Mixture	98 min
Zincroplex Coating[5]	Mixture	Mixture	0.5 - 4.9
Zincrometal®SL[6]	Mixture	Mixture	0.5 – 4.9

Other Coatings (if applicable) [1] <0.8 total

Chemical Name	CAS Number	EC Number	% weight[2]/Coating Weight
Barium Chromate	10-2944-03	231-157-5	10
Chem Phos 2007	Varies[7]	Varies	0.004 – 0.017[8]
Chem Treat – Chromium (VI)	18540-29-9	606-053-1	0.3-12 MG/FT2
Epoxy Resin	Varies	Varies	40 - 60
Phosphate Treat	7664-38-2	231-633-2	100-200MG/FT2
Silicates	Varies	Varies	3 -30
Zinc Potassium Chromate	11103-86-9	234-329-8	1
DiamondPlus™	Mixture	Mixture	< 0.1[9]

1. Refer to product specifications for coating applicability.
2. Percentages are expressed as typical ranges or maximum concentrations of trace elements in the coating, for the purpose of communicating the potential hazards of the finished product. Consult product specifications for specific composition information.
3. Galvalume coated steel is steel that is plated on one or both sides with a 55% Aluminum, min. 40% Zinc Alloy coating. The balance is a mixture of silicon and potentially the trace elements found in steel products. See Section 2 Notes.
4. In addition to trace elements, as stated in Section 2 Notes, the balance of the Galvanneal coating is alloyed Iron from the base metal.
5. Zincroplex® coated steel is steel that is plated on one or both sides with a zinc or zinc alloy coating (such as electrogalvanized, hot dip galvanized, or galvanealed steel), followed by the application (on one side) of coatings of Dacromet ® III (an inorganic zinc dust/chromic oxide coating) and Zincromet® SPX (an organic coating containing zinc dust). For more information on Zincroplex® coating, see product SDS: Zincroplex® Manufacturer: Metal Coatings International.
6. Zincrometal® coated steel is steel that is coated with **Zincrometal® SL** (an inorganic zinc dust/chromic oxide coating followed by an organic coating containing zinc dust). For more information on coating, see product SDS: Zincrometal®SL. Manufacturer: Metal Coatings International.
7. The coating consists of a mixture of crystalline and amorphous forms of Phosphophylite and Hopeite.

8. Percentages listed are calculated from typical coating weights of 0.3-0.8 g/m^3 and substrate thicknesses of 0.6 – 1.1 mm (4.67 – 8.57 kg/m^2)
9. DiamondPlus™ coated steel % weight is expressed as a concentration of the coating mass weight to full product mass weight.

Section 4 – First-aid Measures

4(a) Description of necessary measures:

- **Inhalation: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Eye Contact: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical advice attention. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Skin Contact:** If on skin: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Ingestion: Coated Steel Sheet** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most important symptoms/effects, acute and delayed (chronic):

- **Inhalation: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic heath effect.
- **Eye: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic heath effect.
- **Skin: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic heath effect.
- **Ingestion: Coated Steel Sheet** as sold/shipped is not likely to present an acute or chronic heath effect.

However, during further processing (welding, grinding, burning, etc.) individual components may illicit an acute or chronic heath effect. Refer to Section 11-Toxicological Information.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not Applicable for **Coated Steel Sheet** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards arising from the chemical: Not Applicable for **Coated Steel Sheet** as sold/shipped. When burned, toxic smoke, fume and vapor may be emitted.

5(c) Special protective equipment and precautions for fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not Applicable for **Coated Steel Sheet** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and materials for containment and clean up: Not Applicable for **Coated Steel Sheet** as sold/shipped. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for safe handling: Not Applicable for **Coated Steel Sheet** as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in well ventilated areas. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product. Cut resistant gloves and sleeves should be worn when working with steel products.

7(b) Conditions for safe storage, including any incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): Coated Steel Sheet as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates. The following exposure limits are offered as reference for an experienced industrial hygienist to review.

Ingredients	OSHA PEL[1]	ACGIH TLV[2]	NIOSH REL[3]	IDLH[4]
Iron	10 mg/m^3 (as iron oxide fume)	5.0 mg/m^3 (as iron oxide dust and fume)	5.0 mg/m^3 (as iron oxide dust and fume)	2,500 mg Fe/m^3
Manganese	(C) 5.0 mg/m^3 (as Fume & Mn compounds)	0.2 mg/m^3	(C) 5.0 mg/m^3 1.0 mg/m^3 (as fume) (STEL) 3.0 mg/m^3	500 mg Mn/m^3

Nickel	1.0 mg/m³ (as Ni metal & insoluble compounds)	1.5 mg/m³ (as inhalable fraction[5] Ni metal) 0.2 mg/m³ (as inhalable fraction Ni inorganic only insoluble and soluble compounds)	0.015 mg/m³ (as Ni metal & insoluble and soluble compounds)	10 mg/m³ (as Ni)
Silicon	15 mg/m³ (total dust, PNOR[6]) 5.0 mg/m³ (as respirable fraction, PNOR)	10 mg/m³	10 mg/m³ (as total dust) 5.0 mg/m³ (as respirable dust)	NE

8(a) Occupational Exposure Limits (OELs) (continued):

NE - None Established

1. OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (C) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Peak is defined as the acceptable maximum peak for a maximum duration above the ceiling concentration for an eight-hour shift. A skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures. A "skin" notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. ACGIH-TLVs are only recommended guidelines based upon consensus agreement of the membership of the ACGIH. As such, the ACGIH TLVs are for guideline use purposes and are not legal regulatory standards for compliance purposes. The TLVs are designed for use by individuals trained in the discipline of industrial hygiene relative to the evaluation of exposure to various chemical or biological substances and physical agents that may be found in the workplace.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid- 1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994.
5. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2013 TLVs ® and BEIs ® (Biological Exposure Indices) Appendix D, paragraph A.
6. PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by a limit which is the same as the inert or nuisance dust limit of 15 mg/m3 for total dust and 5 mg/m3 for the respirable fraction.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

  Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.
- **Eyes**: Wear appropriate eye protection to prevent eye contact. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin**: Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment**: An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Solid, Metallic Gray
9(b) Odor: Odorless
9(c) Odor Threshold: NA
9(d) pH: NA
9(e) Melting Point/Freezing Point: ~2750 °F (~1510 C)
9(f) Initial Boiling Point and Boiling Range: ND
9(g) Flash Point: NA
9(h) Evaporation Rate: NA
9(i) Flammability (solid, gas): Non-flammable, non-combustible
9(j) Upper/lower Flammability or Explosive Limits: NA
9(k) Vapor Pressure: NA
9(l) Vapor Density (Air = 1): NA
9(m) Relative Density: 7.85
9(n) Solubility(ies): Insoluble
9(o) Partition Coefficient n-octanol/water: ND
9(p) Auto-ignition Temperature: NA
9(q) Decomposition Temperature: ND
9(r) Viscosity: NA

NA - Not Applicable
ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

10(a) Reactivity: Not Determined (ND) for product in a solid form. Do not use water on molten metal.

10(b) Chemical Stability: Steel products are stable under normal storage and handling conditions.

10(c) Possibility of hazardous reaction: None Known

10(d) Conditions to Avoid: Storage with strong acids or calcium hypochlorite

10(e) Incompatible Materials: Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

10(f) Hazardous Decomposition Products: Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11 Information on toxicological effects: The following toxicity data has been determined for **Coated Steel Sheet** when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Acute Toxicity Hazard (covers Categories 1-4)	NA*	4[a]		**Warning**	Harmful if swallowed.
Eye Damage/ Irritation (covers Categories 1, 2A and 2B)	NA*	2B[c]	No Pictogram	**Warning**	Causes eye irritation.
Skin/Dermal Sensitization (covers Category 1)	NA*	1[d]		**Warning**	May cause an allergic skin reaction.
Carcinogenicity (covers Categories 1A, 1B and 2)	NA*	2[g]		**Warning**	Suspected of causing cancer.
Toxic Reproduction (covers Categories 1A, 1B and 2)	NA*	2[h]		**Warning**	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	NA*	3[i]		**Warning**	May cause respiratory irritation.
STOT following Repeated Exposure (covers Categories 1 and 2)	NA*	1[j]		**Danger**	Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.

* Not Applicable - Semi-formed steel products are considered articles under Reach regulation (REACH REGULATION (EC) No 1907/2006) and are not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008).

Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC_{50} or LD_{50} has been established for **Coated Steel Sheet**. The following data has been determined for the components:

- **Iron:** Rat LD_{50} =98.6 g/kg (REACH)
  Rat LD_{50} =1060 mg/kg (IUCLID)
  Rat LD_{50} =984 mg/kg (IUCLID)
  Rabbit LD_{50} =890 mg/kg (IUCLID)
  Guinea Pig LD_{50} =20 g/kg (TOXNET)
- **Nickel:** LD_{50} >9000 mg/kg (Oral/Rat)
- **Silicon:** L_{D50} = 3160 mg/kg (Oral/Rat)
- **Manganese:** Rat LD_{50} > 2000 mg/kg (REACH)
  Rat LD_{50} > 9000 mg/kg (NLM Toxnet)

b. No Skin (Dermal) Irritation data available for **Coated Steel Sheet** as a as a mixture or its components.

c. No Eye Irritation data available for **Coated Steel Sheet** as a mixture. The following Eye Irritation information was found for the components:

- **Iron:** Causes eye irritation.
- **Silicon:** Slight eye irritation in rabbit protocol
- **Nickel:** Slight eye irritation from particulate abrasion only.

d. No Skin (Dermal) Sensitization data available **Coated Steel Sheet** as a mixture. The following Skin (Dermal) Sensitization information was found for the components:

- **Nickel:** May cause allergic skin sensitization.

e. No Respiratory Sensitization data available for **Coated Steel Sheet** as a mixture or its components.

f. No Germ Cell Mutagenicity data available for **Coated Steel Sheet** as a mixture. The following Mutagenicity and Genotoxicity information was found for the components:

- **Iron:** IUCLID has found some positive and negative findings in vitro.
- **Nickel:** EU RAR has found positive results in vitro and in vivo but insufficient data for classification.

g. Carcinogenicity: IARC, NTP, and OSHA do not list **Coated Steel Sheet** as carcinogens. The following Carcinogenicity information was found for the components:

- **Welding Fumes -** IARC Group 2B carcinogen, a mixture that is possibly carcinogenic to humans.
- **Chromium (as metal and trivalent chromium compounds)** – IARC Group 3 carcinogens, not classifiable as to their human carcinogenicity.
- **Nickel and certain nickel compounds** – Group 2B - metallic nickel Group 1 - nickel compounds ACGIH confirmed human carcinogen. Nickel – EURAR Insufficient evidence to conclude carcinogenic potential in animals or humans; suspect carcinogen classification Category 2 Suspected of causing cancer.

h. No Toxic Reproduction data available for **Coated Steel Sheet** as a mixture. The following Toxic Reproductive information was found for the components:

- **Nickel**: Effects on fertility.

i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Coated Steel Sheet** as a mixture. The following STOT following a Single Exposure data was found for the components:

- **Iron**: Irritating to Respiratory tract.

j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Coated Steel Sheet** as a whole. The following STOT following Repeated Exposure data was found for the components:

- **Manganese**: Inhalation of metal fumes - Degenerative changes in human Brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.,* 1966).
- **Nickel**: Rat 4 wk inhalation LOEL 4 mg/m^3 Lung and Lymph node histopathology. Rat 2 yr inhalation LOEL 0.1 mg/ m^3 Pigment in kidney, effects on hematopoiesis spleen and bone marrow and adrenal tumor. Rat 13 Week Inhalation LOAEC 1.0 mg/m^3 Lung weights, and Alveolar histopathology.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2009, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects:

- **Inhalation:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract. Excessive inhalation of fumes of freshly formed metal oxide particles sized below 1.5 micrometer and usually between 0.02-0.05 micrometers from many metals can produce an acute reaction known as "metal fume fever". Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), metallic taste in the mouth, dryness and irritation of the throat followed by weakness and muscle pain. The symptoms come on in a few hours after excessive exposures and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted. Freshly formed oxide fumes of manganese have been associated with causing metal fume fever.
- **Eye:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes.
- **Skin:** Skin contact with metal dusts may cause irritation or sensitization, possibly leading to dermatitis. Skin contact with metallic fumes and dusts may cause physical abrasion.
- **Ingestion:** Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of metal dust may cause nausea or vomiting.

Acute Effects by component:

- **Iron and iron oxides:** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage. Particles of iron or iron compounds, which become imbedded in the eye, may cause rust stains unless removed fairly promptly.
- **Manganese and manganese oxides:** Manganese and Manganese oxide are harmful if swallowed.
- **Nickel and nickel oxides:** Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin.
- **Silicon and silicon oxides:** May be harmful if swallowed.

Delayed (chronic) Effects by component:

- **Iron and iron oxides**: Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by the International Agency for Research on Cancer (IARC).
- **Manganese and manganese oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to manganese oxides include: speed and coordination of motor function are especially impaired.
- **Nickel and nickel oxides:** Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer in humans. Nickel causes damage to lungs through prolonged or repeated inhalation exposure. IARC lists nickel and certain nickel compounds as Group 2B carcinogens (sufficient animal data). ACGIH 2013 TLVs® and BEIs® lists insoluble nickel compounds as confirmed human carcinogens. Nickel is suspected of damaging the unborn child.
- **Silicon and silicon oxides:** Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust. Eye contact with pure material can cause particulate irritation. Skin contact with silicon dusts may cause physical abrasion.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Coated Steel Sheet** as sold/shipped. However, individual components of the product when processed have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide**: LC_{50}: >1000 mg/L; Fish 48 h-EC_{50} > 100 mg/L (Currenta, 2008k); 96 h-$LC_0 \geq$ 50,000 mg/L Test substance: Bayferrox 130 red (95 – 97% Fe_2O_3; < 4% SiO_2 and Al_2O_3) (Bayer, 1989a)
- **Hexavalent Chrome:** EU RAR listed as category 1, found acute EC_{50} and LD_{50} to algae and invertebrates < 1 mg.
- **Nickel Oxide:** IUCLID found LC_{50} in fish, invertebrates and algae > 100 mg/l.

12(b) Persistence & Degradability: No Data Available for **Coated Steel Sheet** as sold/shipped or individual components.

12(c) Bioaccumulative Potential: No Data Available for **Coated Steel Sheet** as sold/shipped or individual components.

12(d) Mobility (in soil): No data available for **Coated Steel Sheet** as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Not Reported

Signal Word: No Signal Word

Hazard Symbol: No Symbol

Hazard Statement: No Statement

Section 13 - Disposal Considerations

Disposal: Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03-04 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Coated Steel Sheet in its original form. Any alterations can void this information.

Section 14 - Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 **does not** regulate **Coated Steel Sheet** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: Not Applicable (NA)	**Packaging Authorizations**	**Quantity Limitations**
Shipping Symbols: NA	**a) Exceptions:** NA	**a) Passenger, Aircraft, or Railcar:** NA
Hazard Class: NA	**b) Group:** NA	**b) Cargo Aircraft Only:** NA
UN No.: NA	**Authorization:** NA	**Vessel Stowage Requirements**
Packing Group: NA		**a) Vessel Stowage:** NA
DOT/ IMO Label: NA		**b) Other:** NA
Special Provisions (172.102): NA		**DOT Reportable Quantities**: NA

International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Coated Steel Sheet** as a hazardous material.

Shipping Name: Not Applicable (NA) **Classification Code:** NA **UN No.:** NA **Packing Group:** NA **ADR Label:** NA **Special Provisions:** NA **Limited Quantities:** NA	**Packaging** **a) Packing Instructions:** NA **b) Special Packing Provisions:** NA **Mixed Packing Provisions:** NA	**Portable Tanks & Bulk Containers** **a) Instructions:** NA **Special Provisions:** NA

International Air Transport Association (IATA) does not regulate **Coated Steel Sheet** as a hazardous material.

Shipping Name: Not Applicable (NA) **Class/Division:** NA Hazard Label (s): **NA UN No.:** NA **Packing Group:** NA **Excepted Quantities (EQ):** NA	**Passenger & Cargo Aircraft Limited Quantity (EQ)**		**Cargo Aircraft Only Pkg Inst:** NA **Max Net Qty/Pkg:** NA	**Special Provisions:** NA **ERG Code:** NA
	Pkg Inst: NA **Max Net Qty/Pkg:** NA	**Pkg Inst:** NA **Max Net Qty/Pkg:** NA		

Pkg Inst – Packing Instructions Max Net Qty/Pkg – Maximum Net Quantity per Package ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) Classification: Coated Steel Sheet does not have a TDG classification.

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to a ClarkDietrich Building Systems product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.*

This product and/or its constituents are subject to the following regulations:
OSHA Regulations: Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): The product, **Coated Steel Sheet** as a whole is not listed. However, individual components of the product are listed: Refer to Section 8, Exposure Controls and Personal Protection

EPA Regulations: The product, **Coated Steel Sheet** is not listed as a whole. However, individual components of the product are listed:

Components	Regulations
Manganese	CAA, SARA 313, SDWA
Nickel	CAA, CERCLA, CWA, SARA 313

SARA 311/312 Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Regulations Key:

CAA	Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 [As of: 8/18/06])
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14), 9603(a); 40 CFR Sec. 302.4, Table 302.4, Table 302.4 and App. A)
CWA	Clean Water Act (33 USC Secs. 1311; 1314(b), (c), (e), (g); 136(b), (c); 137(b), (c) [as of 8/2/06])
RCRA	Resource Conservation Recovery Act (42 USC Sec. 6921; 40 CFR Part 261 App VIII)
SARA	Superfund Amendments and Reauthorization Act of 1986 Title III Section 302 Extremely Hazardous Substances (42 USC Secs. 11023, 13106; 40 CFR sec. 372.65) and Section 313 Toxic Chemicals (42 USC Secs. 11023, 13106; 40 CFR Sec. 372.65 [as of 6/30/05])
TSCA	Toxic Substance Control Act (15 U.S.C. s/s 2601 et seq. [1976])
SDWA	Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. [1974])

Section 313 Supplier Notification: The product, **Coated Steel Sheet** contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
7439-96-5	Manganese	2.0 max
7440-02-0	Nickel	0.5 max

State Regulations: The product, **Coated Steel Sheet** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

Pennsylvania Right to Know: Contains regulated material in the following categories:

- Hazardous Substances: Manganese and Silicon
- Environmental Hazards: Manganese and Nickel
- Special Hazardous Substance: Nickel

California Prop. 65: Contains elements known to the State of California to cause cancer or reproductive toxicity. This includes nickel, chromium (VI), and not intentionally added trace amounts arsenic, cadmium, cobalt and lead.

New Jersey: Contains regulated material in the following categories:

- Hazardous Substance: Manganese, and Nickel

Minnesota: Manganese, Nickel and Silicon Massachusetts: Manganese and Nickel

Other Regulations:

WHMIS Classification (Canadian): The product, **Coated Steel Sheet** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Iron	B4, D2B
Manganese	B4, D2A
Nickel	D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: ClarkDietrich Building Systems

Original Issue Date: 05/01/2015

Revised Date: 07/15/2018

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

HEALTH= **1**, Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.

FIRE= **0**, Materials that will not burn

PHYSICAL HAZARD= **0**, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

National Fire Protection Association (NFPA)

HEALTH = **1**, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FLAMMABILITY = **0**, Materials that will not burn

INSTABILITY = **0**, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists		**NIF**	No Information Found
BEIs	Biological Exposure Indices		**NIOSH**	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service		**NTP**	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act		**ORC**	Organization Resources Counselors
CFR	Code of Federal Regulations		**OSHA**	Occupational Safety and Health Administration
CNS	Central Nervous System		**PEL**	Permissible Exposure Limit
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract		**PNOR**	Particulate Not Otherwise Regulated
HMIS	Hazardous Materials Identification System		**PNOC**	Particulate Not Otherwise Classified
IARC	International Agency for Research on Cancer		**PPE**	Personal Protective Equipment
LC50	Median Lethal Concentration		**ppm**	parts per million
LD50	Median Lethal Dose		**RCRA**	Resource Conservation and Recovery Act
LD_{Lo}	Lowest Dose to have killed animals or humans		**RTECS**	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit		**SARA**	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level		**SCBA**	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration		**SDS**	Safety Data Sheet
$\mu g/m^3$	microgram per cubic meter of air		**STEL**	Short-term Exposure Limit
mg/m^3	milligram per cubic meter of air		**TLV**	Threshold Limit Value
mppcf	million particles per cubic foot		**TWA**	Time-weighted Average
MSHA	Mine Safety and Health Administration		**UEL**	Upper Explosive Limit
NFPA	National Fire Protection Association			

Disclaimer: This information is taken from sources or based upon data believed to be reliable. Our objective in sending this information is to help you protect the health and safety of your personnel and to comply with the OSHA Hazard Communication Standard and Title III of the Emergency Planning and Community Right-to-Know Act. ClarkDietrich Building Systems makes no warranty as to the absolute correctness, completeness, or sufficiency of any of the foregoing, or any additional, or other measures that may not be required under particular conditions.

Safety Data Sheet

1. Identification

Product Information	011030198
Product Name:	Sandblast Pastel Base
Recommended Use	Professional Use Only
Uses advised against	Not suitable for use in the homeworker (DIY) application
Supplier	Dryvit Systems, Inc. One Energy Way, West Warwick, RI 02893 (401) 822-4100
Emergency telephone number	Chemtrec: +1-800-424-9300 USA Chemtrec: +1 703-527-3887 ex-USA

2. Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200
Carc. 1A
Muta. 1B
Skin Sens. 1

GHS Pictograms

Signal Word
Danger

Unknown Actue Toxicity
10.6% of the mixture consists of ingredients of unknown acute toxicity

HAZARD STATEMENTS
May cause cancer.
May cause genetic defects.
May cause an allergic skin reaction.

Precautionary Statements - Prevention
Obtain special instructions before use.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
If on skin: Wash with plenty of water
If exposed or concerned: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.

Precautionary Statements - Storage
Store locked up.

Precautionary Statements - Disposal

Dispose of contents in accordance with local/regional/national/international regulations

3. Composition/Information on Ingredients

ChemicalName	CAS-No.	Wt.%
Crystalline silica (Quartz) (Respirable)	14808-60-7	25-50
CLAY (KAOLIN)	1332-58-7	2.5-10
Titanium dioxide	13463-67-7	2.5-10
Calcium carbonate (Limestone)	1317-65-3	2.5-10
Polyethylene glycol octylpheny ether	9036-19-5	0.1-1.0
ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL	25265-77-4	0.1-1.0
Amorphous Silica	7631-86-9	0.1-1.0
Stoddard Solvent	8052-41-3	0.1-1.0
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0.1-1.0

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid Measures

Descriptionoffirst-aidmeasures

General advice

When symptoms persist or in all cases of doubt seek medical advice.

Inhalation

Move to fresh air

Skin contact

Wash skin with soap and water.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion

Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

Symptoms

See Section 2.2, Label Elements and/or Section 11, Toxicological effects

Notes to physician

Treat symptomatically.

5. Fire-fighting Measures

Extinguishingmedia

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which shall not be used for safety reasons

None.

Specialhazardsarisingfromthesubstanceormixture

No information available.

Adviceforfirefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personalprecautions,protectiveequipmentandemergencyprocedures

Personal precautions

Use personal protective equipment. Ensure adequate ventilation, especially in confined areas.

Advice for emergency responders

No Information

Environmentalprecautions

Prevent product from entering drains. See Section 12 for additional Ecological information.

Methodsandmaterialsforcontainmentandcleaningup

Methods for Containment

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

Methods for cleaning up

No Information

Referencetoothersections

See section 8 for more information.

7.HandlingandStorage

Conditionsforsafestorage,includinganyincompatibilities

Advice on safe handling

No Information

Hygiene measures

General industrial hygiene practice. When using do not eat or drink.

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place.

Specific use(s)

Specific use(s)

No Information

Exposure scenario

No information

8. Exposure Controls/Personal Protection

IngredientswithOccupationalExposureLimits

ChemicalName	ACGIHTLV-TWA	ACGIH-TLVSTEL	OSHAPEL-TWA	OSHAPEL-CEILING
Crystalline silica (Quartz) (Respirable)	0.025 mg/m^3	N.E.	50 µg/m^3	N.E.
CLAY (KAOLIN)	2 mg/m^3	N.E.	15 mg/m^3	N.E.
Titanium dioxide	10 mg/m^3	N.E.	15 mg/m^3	N.E.
Calcium carbonate (Limestone)	N.E.	N.E.	15 mg/m^3	N.E.
Stoddard Solvent	100 ppm	N.E.	500 ppm	N.E.

TLV = Threshold Limit Value TWA = Time Weighted Average PEL = Personal Exposure Limit STEL = Short-Term Exposure Limit MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Engineering Measures

Showers, eyewash stations, and ventilation systems.

Personal protective equipment

Eye/Face Protection

Safety glasses with side-shields.

Hand Protection

Wear suitable protective clothing.

Skin and body protection

No Information

Respiratory protection

No Information

Hygiene measures

General industrial hygiene practice. When using do not eat or drink.

Environmental Exposure Controls

No Information

9. Physical and chemical properties

Informationonbasicphysicalandchemicalproperties

Physical state	No Information
Appearance	No Information
Color	No Information
Odor	No Information
Odor Threshold	No Information
pH	No Information
Melting/freezing point (°C)	No Information
Flash Point (°C)	No Information
Boiling point/boiling range (°C)	3,000
Evaporation rate	No Information Available
Explosive properties	No Information
Flammability Limits in Air	Does not Support Combustion
Vapor pressure	No Information
Vapor density	No Information
Specific Gravity (g/cm^3)	0.000
Water solubility	No Information
Partition coefficient	No Information
Autoignition temperature (°C)	No Information
Decomposition Temperature °C (°C)	No Information
Viscosity, kinematic	No Information

Otherinformation

Volatile organic compounds (VOC) content	No Information

10. Stability and Reactivity

Reactivity

Stable under normal conditions

Chemicalstability
Stable under recommended storage conditions

Possibilityofhazardousreactions
None known based on information supplied

ConditionstoAvoid
None known

IncompatibleMaterials
None known based on information supplied

HazardousDecompositionProducts
None known

11. Toxicological Information

Informationontoxicologicaleffects

Acute Toxicity

Product Information

Acute toxicity

CAS-No.	ChemicalName	LD50Oral	LD50Dermal	LC50Inhalation
1332-58-7	CLAY (KAOLIN)	>5000 mg/kg Rat	N.I.	N.I.
9036-19-5	Polyethylene glycol octylpheny ether	4	N.I.	N.I.
25265-77-4	ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL	3200 mg/kg Rat	>15200 mg/kg Rat	>3.55 mg/L Rat (Vapor)
7631-86-9	Amorphous Silica	>5000 mg/kg Rat	>2000 mg/kg Rabbit	N.I.
4719-04-4	Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4	N.I.	N.I.

N.I. = No Information

Skincorrosion/irritation.
May cause irritation. SKIN IRRITANT

Eyedamage/irritation.
No Information

Respiratoryorskinsensitization.
No Information

Ingestion.
No Information

Germcellmutagenicity.
Substances which should be regarded as being mutagenic to man.

Carcinogenicity.
Contains a known or suspected carcinogen.

Reproductivetoxicity.
No Information

Specifictargetorgansystemictoxicity(singleexposure).
No Information

Specifictargetorgansystemictoxicity(repeatedexposure).
No Information

Aspirationhazard.
No Information

PrimaryRoute(s)ofEntry
No Information

12. Ecological Information

Toxicity

59.10408 % Information on toxicological effects

Ecotoxicityeffects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL 25265-77-4	EC50 72 h Pseudokirchneriella subcapitata 18.4 mg/L	LC50 96 h Pimephales promelas 30 mg/L	-
Amorphous Silica 7631-86-9	EC50 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50 96 h Brachydanio rerio 5000 mg/L	EC50 48 h Ceriodaphnia dubia 7600 mg/L

Persistenceanddegradability

No data are available on the product itself.

Bioaccumulativepotential

Discharge into the environment must be avoided.

CAS-No.	ChemicalName	logPOW
25265-77-4	ISOBUTYRIC ACID, MONOESTER WITH 2,2,4-TRIMETHYLPENTANE-1,3-DIOL	3.47

Mobilityinsoil

No information

Otheradverseeffects

No information

13.DisposalConsiderations

Wastetreatmentmethods

Wastefromresidues/unusedproducts

Disposal should be in accordance with applicable regional, national and local laws and regulations.

No Information

14. Transport Information

DOT

Hazard Class:

IMDG

Hazard Class:
UN Number:
Packing Group:

IATA

15. Regulatory Information

International Inventories:

TSCA	Contains Non Listed Components
DSL	Contains Non Listed Components
EINECS/ELINCS	Contains Non Listed Components
ENCS	Contains Non Listed Components
IECSC	Contains Non Listed Components
KECI	Contains Non Listed Components
PICCS	Contains Non Listed Components
AICS	Contains Non Listed Components
NZIoC	No Information

TSCA	United States Toxic Substances Control Act Section 8(b) Inventory
DSL	Canadian Domestic Substances List
EINECS/ELINCS	European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	Japan Existing and New Chemical Substances IECSC
	China Inventory of Existing Chemical Substances
KECL	Korean Existing and Evaluated Chemical Substances
PICCS	Philippines Inventory of Chemicals and Chemical Substances
AICS	Australian Inventory of Chemical Substances
NZIoC	New Zealand Inventory of Chemicals

SARASECTION313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXICSUBSTANCESCONTROLACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

ChemicalName	CAS-No.
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4
Benzophenone	119-61-9
Acetaldehyde	75-07-0

CALIFORNIAPROPOSITION65CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

ChemicalName	CAS-No.
Titanium dioxide	13463-67-7
Aluminium magnesium silicate	12174-11-7
Benzophenone	119-61-9
1,4-DIOXANE	123-91-1
Ethylene oxide	75-21-8
ETHYL ACRYLATE	140-88-5
Acetaldehyde	75-07-0

CALIFORNIAPROPOSITION65REPRODUCTIVETOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

ChemicalName	CAS-No.

Ethylene oxide	75-21-8

16. Other Information

Revision Date:	5/4/2018	Supersedes Date:	New SDS
Reason for revision:	No Information		
Datasheet produced by:	Regulatory Department		

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed.

SAFETY DATA SHEET

Revision Date 05-Jun-2017
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Sandpebble® Pastel Base
Product code 011021198

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users
Restrictions on use No information available

Uses advised against Not suitable for use in homeworker (DIY) applications

1.3 Details of the supplier of the safety data sheet

Supplier

Dryvit Systems, Inc
One Energy Way,
West Warwick, RI 02893
Phone Number: (401) 822-4100
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

1.4 Emergency telephone number

Emergency telephone number

Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute toxicity - Oral	Not Classified
Acute toxicity - Dermal	Not Classified
Acute toxicity - Inhalation (Gases)	Not Classified
Acute toxicity - Inhalation (Vapors)	Not Classified
Acute toxicity - Inhalation (Dusts/Mists)	Not Classified
Skin corrosion/irritation	Not Classified
Serious eye damage/eye irritation	Not Classified
Respiratory sensitization	Not Classified
Skin sensitization	Category 1
Germ cell mutagenicity	Not Classified
Carcinogenicity	Category 1A

Reproductive toxicity	Not Classified
Specific target organ toxicity (single exposure)	Not Classified
Specific target organ toxicity (repeated exposure)	Not Classified
Aspiration toxicity	Not Classified

2.2 Label elements

Signal Word
Danger

Hazard Statements
May cause an allergic skin reaction
May cause cancer

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash hands and face thoroughly after handling

Precautionary Statements - Response
Get medical advice/attention if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Rinse skin with water/shower
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Fight fire with normal precautions from a reasonable distance

Precautionary Statements - Storage
Store in accordance with local regulations

Precautionary Statements - Disposal
Refer to manufacturer/supplier for information on recovery/recycling

2.3. Other Hazards Hazards not otherwise classified (HNOC)
Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity 24.2465% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance
Mixture

Chemical Name	CAS No.	Weight-%
Crystalline silica (Quartz) (Respirable)	14808-60-7	40 - 50%

Calcium carbonate (Limestone)	1317-65-3	10 - 20%
CLAY (KAOLIN)	1332-58-7	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
Aluminium Hydroxide	21645-51-2	0 - 10%
CELLULOSE	9004-34-6	0 - 10%
Stoddard Solvent	8052-41-3	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%

*The specific chemical identity and/or exact percentage (concentration) of this composition has been witheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice If symptoms persist, call a physician.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.

Skin contact Immediate medical attention is not required. Call a physician if irritation develops or persists.

Inhalation Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No information available.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture

Special Hazard
No information available.

Hazardous Combustion Products No information available.

Explosion Data
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

Materials to Avoid Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Crystalline silica (Quartz) (Respirable) 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	: (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.025 mg/m³	TWA: 0.025 mg/m³	TWA: 0.1 mg/m³	TWA: 0.10 mg/m³
Calcium carbonate (Limestone) 1317-65-3	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ TWA: 3 mg/m³ STEL: 20 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 5 mg/m³	TWA: 2 mg/m³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³
Aluminium Hydroxide 21645-51-2	TWA: 1 mg/m³ respirable fraction	-	TWA: 1.0 mg/m³			TWA: 1 mg/m³
CELLULOSE 9004-34-6	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 5 mg/m³	TWA: 5 mg/m³	TWA: 10 mg/m³
Stoddard Solvent 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m³	TWA: 290 mg/m³ STEL: 580 mg/m³	TWA: 100 ppm TWA: 572 mg/m³	TWA: 100 ppm TWA: 525 mg/m³	TWA: 525 mg/m³

8.2 Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear:. Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/ protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Viscous liquid	**Color**	Off-white Gray or Colored liquid
Odor	Faint	**Odor Threshold**	No information available

Property	**Values**	**Remarks • Methods**
pH		
Melting/freezing point		No information available
Boiling point/boiling range	> °C	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity		
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content 16.74 g/l

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity 24.2465% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50	99,999.00 mg/kg
Dermal LD50	99,999.00 mg/kg
Gas	99,999.00 mg/l
LC50 (Dust/Mist)	99,999.00 mg/l
LC50 (Vapor)	99,999.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (Quartz) (Respirable) 14808-60-7	500 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	10000 mg/kg (Rat)	-	-
Aluminium Hydroxide 21645-51-2	5000 mg/kg (Rat)	-	-
CELLULOSE 9004-34-6	-	-	> 5800 mg/m³ (Rat) 4 h

11.2 Information on toxicological effects

Skin corrosion/irritation
Product Information
• No information available
Component Information
• No information available

Serious eye damage/eye irritation
Product Information
• No information available
Component Information
• No information available

Respiratory or skin sensitization
Product Information
• No information available
Component Information
• No information available

Germ cell mutagenicity
Product Information
• No information available
Component Information
• No information available

Carcinogenicity
Product Information
• The table below indicates whether each agency has listed any ingredient as a carcinogen
Component Information
•

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline silica (Quartz) (Respirable) 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	

Reproductive toxicity
Product Information
• No information available
Component Information
• No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Other adverse effects
Product Information
• No information available
Component Information
• No information available

Aspiration hazard
Product Information
• No information available
Component Information
• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity No information available

5.327 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

Ozone	Not Applicable

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information

15.1 International Inventories

TSCA	-
DSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances **IECSC**
- China Inventory of Existing Chemical Substances **KECL** -
Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any

chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
ASHES (RESIDUES) - 68131-74-8	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
Benzophenone - 119-61-9	Carcinogen
1,4-DIOXANE - 123-91-1	Carcinogen
ETHYL ACRYLATE - 140-88-5	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive

16. Other information

NFPA	**Health Hazard** 0	**Flammability** 0	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 0	**Flammability** 0	**Physical Hazard** 0	**Personal protection** X

Legend:
ACGIH (American Conference of Governmental Industrial Hygienists)
Ceiling (C)
DOT (Department of Transportation)
EPA (Environmental Protection Agency)
IARC (International Agency for Research on Cancer)
International Air Transport Association (IATA)
International Maritime Dangerous Goods (IMDG)
NIOSH (National Institute for Occupational Safety and Health)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
Reportable Quantity (RQ)
Skin designation (S*)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
TWA (time-weighted average)

Revision Date 05-Jun-2017
Revision Note
No information available
Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 20-Dec-2016
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Freestyle®, Freestyle® Fine, Freestyle® Smooth, Freestyle® - Si
Product code 011040197

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users
Restrictions on use No information available

Uses advised against Not suitable for use in homeworker (DIY) applications

1.3 Details of the supplier of the safety data sheet

Supplier

Dryvit Systems, Inc.
1 Energy Way
West Warwick, RI 02893
(401) 822-4100

E-mail Address **ehs@dryvit.com**

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin sensitization	Category 1
Carcinogenicity	Category 1A

2.2 Label elements

Signal Word
Danger

Hazard Statements
May cause an allergic skin reaction
May cause cancer

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Keep/Store away from clothing/ combustible materials

Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Storage
Store in accordance with local regulations

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)
Not Applicable

2.4 Other information

Not Applicable

3. Composition/Information on Ingredients

Substance
Mixture

Chemical Name	CAS-No	Weight %
Crystalline silica (Quartz) (Respirable)	14808-60-7	60 - 70%
CLAY (KAOLIN)	1332-58-7	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
Stoddard Solvent	8052-41-3	0 - 10%
Amorphous Silica	7631-86-9	0 - 10%
Aluminium Hydroxide	21645-51-2	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%
CELLULOSE	9004-34-6	0 - 10%

*The specific chemical identity and/or exact percentage (concentration) of this composition has been witheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice If symptoms persist, call a physician.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.

Skin contact Immediate medical attention is not required. Call a physician if irritation develops or persists.

Inhalation Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No information available.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture

Special Hazard
No information available

Hazardous Combustion Products No information available.

Explosion Data
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Spills and leaks are not likely. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

Materials to Avoid Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Crystalline silica (Quartz) (Respirable) 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	: (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.025 mg/m³	TWA: 0.025 mg/m³	TWA: 0.1 mg/m³	TWA: 0.10 mg/m³
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 5 mg/m³	TWA: 2 mg/m³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³
Stoddard Solvent 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m³	TWA: 290 mg/m³ STEL: 580 mg/m³	TWA: 100 ppm TWA: 572 mg/m³	TWA: 100 ppm TWA: 525 mg/m³	TWA: 525 mg/m³
Amorphous Silica 7631-86-9	-	TWA: 20 mppcf : (80)/(% SiO2) mg/m³ TWA				
Aluminium Hydroxide 21645-51-2	TWA: 1 mg/m³ respirable fraction	-	TWA: 1.0 mg/m³			TWA: 1 mg/m³
CELLULOSE 9004-34-6	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 5 mg/m³	TWA: 5 mg/m³	TWA: 10 mg/m³

8.2 Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear:. Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/ protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Viscous Liquid	**Color**	Off-white Gray or Colored liquid
Odor	Faint	**Odor Threshold**	No information available

Property	**Values**	**Remarks • Methods**
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content	19.1 g/l	
Density	8.0 - 15.0 lbs/gal	

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (Quartz) (Respirable) 14808-60-7	500 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	10000 mg/kg (Rat)	-	-
Amorphous Silica 7631-86-9	5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
Aluminium Hydroxide 21645-51-2	5000 mg/kg (Rat)	-	-
CELLULOSE 9004-34-6	-	-	> 5800 mg/m³ (Rat) 4 h

11.2 Information on toxicological effects

Skin corrosion/irritation
Product Information
• No information available
Component Information
• No information available

Serious eye damage/eye irritation
Product Information
• No information available
Component Information
• No information available

Respiratory or skin sensitization
Product Information
• May cause allergic skin reaction
Component Information
• No information available

Germ cell mutagenicity
Product Information
• No information available
Component Information
• No information available

Carcinogenicity
Product Information
• The table below indicates whether each agency has listed any ingredient as a carcinogen
Component Information
•

Chemical Name	ACGIH	IARC	NTP	OSHA

Crystalline silica (Quartz) (Respirable) 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	

Reproductive toxicity
Product Information
• No information available
Component Information
• No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Other adverse effects
Product Information
• No information available
Component Information
• No information available

Aspiration hazard
Product Information
• No information available
Component Information
• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity No information available

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Amorphous Silica 7631-86-9	EC50: 72 h Pseudokirchneriella subcapitata 440 mg/L	LC50: 96 h Brachydanio rerio 5000 mg/L static	EC50: 48 h Ceriodaphnia dubia 7600 mg/L

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
ASHES (RESIDUES) - 68131-74-8	Carcinogen
Benzophenone - 119-61-9	Carcinogen

N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
1,4-DIOXANE - 123-91-1	Carcinogen
ETHYL ACRYLATE - 140-88-5	Carcinogen

16. Other information

NFPA	**Health Hazard** 1	**Flammability** 0	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 1	**Flammability** 0	**Physical Hazard** 0	**Personal protection** B

Legend:
ACGIH (American Conference of Governmental Industrial Hygienists)
Ceiling (C)
DOT (Department of Transportation)
EPA (Environmental Protection Agency)
IARC (International Agency for Research on Cancer)
International Air Transport Association (IATA)
International Maritime Dangerous Goods (IMDG)
NIOSH (National Institute for Occupational Safety and Health)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
Reportable Quantity (RQ)
Skin designation (S*)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
TWA (time-weighted average)

Revision Date 20-Dec-2016
Revision Note
No information available

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 05-Jun-2017
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Sandblast®, Sandblast® - Si, Sandblast® NTX
Product code 011030198

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users
Restrictions on use No information available

Uses advised against Not suitable for use in homeworker (DIY) applications

1.3 Details of the supplier of the safety data sheet

Supplier

Dryvit Systems, Inc
One Energy Way,
West Warwick, RI 02893
Phone Number: (401) 822-4100
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

1.4 Emergency telephone number

Emergency telephone number

Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Skin sensitization	Category 1
Carcinogenicity	Category 1A

2.2 Label elements

Signal Word
Danger

Hazard Statements
May cause an allergic skin reaction
May cause cancer

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash hands and face thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response
Get medical advice/attention if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Rinse skin with water/shower
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Fight fire with normal precautions from a reasonable distance

Precautionary Statements - Storage
Store in accordance with local regulations

Precautionary Statements - Disposal
Refer to manufacturer/supplier for information on recovery/recycling

2.3. Other Hazards Hazards not otherwise classified (HNOC)
Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity 22.4031% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance
Mixture

Chemical Name	CAS No.	Weight-%
Crystalline silica (Quartz) (Respirable)	14808-60-7	40 - 50%
Calcium carbonate (Limestone)	1317-65-3	10 - 20%
CLAY (KAOLIN)	1332-58-7	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%

*The specific chemical identity and/or exact percentage (concentration) of this composition has been witheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice If symptoms persist, call a physician.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.

Skin contact Immediate medical attention is not required. Call a physician if irritation develops or persists.

Inhalation Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No information available.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture

Special Hazard
No information available.

Hazardous Combustion Products No information available.

Explosion Data
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

Materials to Avoid Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Crystalline silica (Quartz) (Respirable) 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	: (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.025 mg/m³	TWA: 0.025 mg/m³	TWA: 0.1 mg/m³	TWA: 0.10 mg/m³
Calcium carbonate (Limestone) 1317-65-3	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ TWA: 3 mg/m³ STEL: 20 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 5 mg/m³	TWA: 2 mg/m³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³

8.2 Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear:. Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/ protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Viscous liquid	**Color**	Off-white Gray or Colored liquid
Odor	Faint	**Odor Threshold**	No information available

Property	**Values**	**Remarks • Methods**
pH	>8	
Melting/freezing point		No information available
Boiling point/boiling range	> 100 °C / 212 °F	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.96 - 1.80 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content	18.00 g/l	
Density	8.0 - 15.0 lbs/gal	

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

Unknown Acute Toxicity 22.4031% of the mixture consists of ingredient(s) of unknown toxicity

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (Quartz) (Respirable) 14808-60-7	500 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	10000 mg/kg (Rat)	-	-

11.2 Information on toxicological effects

Skin corrosion/irritation
Product Information
• No information available
Component Information
• No information available

Serious eye damage/eye irritation
Product Information
• No information available
Component Information
• No information available

Respiratory or skin sensitization
Product Information
• No information available
Component Information
• No information available

Germ cell mutagenicity
Product Information
• No information available
Component Information
• No information available

Carcinogenicity
Product Information
• The table below indicates whether each agency has listed any ingredient as a carcinogen
Component Information
•

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline silica (Quartz) (Respirable) 14808-60-7	A2	Group 1	Known	
Titanium dioxide 13463-67-7	-	Group 2B	-	

Reproductive toxicity
Product Information
• No information available
Component Information
• No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Other adverse effects
Product Information
• No information available
Component Information
• No information available

Aspiration hazard
Product Information
• No information available
Component Information
• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity No information available

Ecotoxicity effects

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT Not regulated

MEX Not regulated

IMDG Not regulated

IATA Not regulated

15. Regulatory information

15.1 International Inventories

TSCA	-
DSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances **IECSC**
- China Inventory of Existing Chemical Substances **KECL** -
Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
ASHES (RESIDUES) - 68131-74-8	Carcinogen
Benzophenone - 119-61-9	Carcinogen
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
1,4-DIOXANE - 123-91-1	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
ETHYL ACRYLATE - 140-88-5	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen

16. Other information

NFPA	**Health Hazard** 1	**Flammability** 0	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 1	**Flammability** 0	**Physical Hazard** 0	**Personal protection** B

Legend:
ACGIH (American Conference of Governmental Industrial Hygienists)
Ceiling (C)
DOT (Department of Transportation)
EPA (Environmental Protection Agency)
IARC (International Agency for Research on Cancer)
International Air Transport Association (IATA)
International Maritime Dangerous Goods (IMDG)
NIOSH (National Institute for Occupational Safety and Health)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
Reportable Quantity (RQ)
Skin designation (S*)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
TWA (time-weighted average)

Revision Date 05-Jun-2017
Revision Note
No information available

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 01-Jun-2017
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Sandpebble® Fine Pastel Base
Product code 011022198

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Restricted to professional users
Restrictions on use No information available

Uses advised against Not suitable for use in homeworker (DIY) applications

1.3 Details of the supplier of the safety data sheet

Supplier

Dryvit Systems, Inc
One Energy Way,
West Warwick, RI 02893
Phone Number: (401) 822-4100
Toll Free Number: (800) 556-7752

E-mail Address ehs@dryvit.com

1.4 Emergency telephone number

Emergency telephone number

Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute toxicity - Oral	Category 4
Skin sensitization	Category 1
Germ cell mutagenicity	Category 1A
Carcinogenicity	Category 1A

2.2 Label elements

Signal Word
Danger

Hazard Statements

Harmful if swallowed
May cause an allergic skin reaction
May cause genetic defects
May cause cancer

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash hands and face thoroughly after handling

Precautionary Statements - Response
Get medical advice/attention if you feel unwell
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Rinse skin with water/shower
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Fight fire with normal precautions from a reasonable distance

Precautionary Statements - Storage
Store in accordance with local regulations

Precautionary Statements - Disposal
Refer to manufacturer/supplier for information on recovery/recycling

2.3. Other Hazards Hazards not otherwise classified (HNOC)
Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity 37.3207% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance
Mixture
The product contains no substances known to be hazardous to health in concentrations which need to be taken into account

Chemical Name	CAS No.	Weight-%
Crystalline silica (Quartz) (Respirable)	14808-60-7	30 - 40%
Calcium carbonate (Limestone)	1317-65-3	30 - 40%
CLAY (KAOLIN)	1332-58-7	0 - 10%
Titanium dioxide	13463-67-7	0 - 10%
Stoddard Solvent	8052-41-3	0 - 10%
Hexahydro-1,3,5-tris(hydroxyethyl)-s-triazine	4719-04-4	0 - 10%

*The specific chemical identity and/or exact percentage (concentration) of this composition has been witheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice If symptoms persist, call a physician.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician if irritation develops or persists.

Skin contact Immediate medical attention is not required. Call a physician if irritation develops or persists.

Inhalation Immediate medical attention is not required. Get medical attention if symptoms occur. Call a physician if irritation develops or persists.

Ingestion If swallowed, do not induce vomiting - seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician No information available.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Special hazards arising from the substance or mixture

Special Hazard
No information available.

Hazardous Combustion Products No information available.

Explosion Data
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Store in accordance with local regulations. Keep from freezing.

Materials to Avoid Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Crystalline silica (Quartz) (Respirable) 14808-60-7	TWA: 0.025 mg/m³ respirable fraction	: (30)/(%SiO2 + 2) mg/m³ TWA total dust : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.025 mg/m³	TWA: 0.025 mg/m³	TWA: 0.1 mg/m³	TWA: 0.10 mg/m³
Calcium carbonate (Limestone) 1317-65-3	-	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ TWA: 3 mg/m³ STEL: 20 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	
CLAY (KAOLIN) 1332-58-7	TWA: 2 mg/m³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 2 mg/m³	TWA: 2 mg/m³	TWA: 5 mg/m³	TWA: 2 mg/m³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³	TWA: 10 mg/m³
Stoddard Solvent 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m³	TWA: 290 mg/m³ STEL: 580 mg/m³	TWA: 100 ppm TWA: 572 mg/m³	TWA: 100 ppm TWA: 525 mg/m³	TWA: 525 mg/m³

8.2 Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear:. Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/ protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid		
Appearance	Viscous liquid	**Color**	Off-white Gray or Colored liquid
Odor	Faint	**Odor Threshold**	No information available

Property	**Values**	**Remarks • Methods**
pH		
Melting/freezing point		No information available
Boiling point/boiling range	> °C	
Flash Point	no data available	No information available
Evaporation rate		
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity		
Water solubility	Soluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		
Decomposition temperature		
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content 16.45 g/l

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

.

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Do not freeze. To avoid thermal decomposition, do not overheat.

10.5 Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity

Numerical measures of toxicity: Product Information

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity 37.3207% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50 872.00 mg/kg mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (Quartz) (Respirable) 14808-60-7	500 mg/kg (Rat)	-	-
Titanium dioxide 13463-67-7	10000 mg/kg (Rat)	-	-

11.2 Information on toxicological effects

Skin corrosion/irritation
Product Information
• No information available
Component Information
• No information available

Serious eye damage/eye irritation
Product Information
• No information available
Component Information
• No information available

Respiratory or skin sensitization
Product Information
• No information available
Component Information
• No information available

Germ cell mutagenicity
Product Information
• No information available
Component Information
• No information available

Carcinogenicity
Product Information
• The table below indicates whether each agency has listed any ingredient as a carcinogen
Component Information
• No information available

Chemical Name	ACGIH	IARC	NTP	OSHA
Crystalline silica (Quartz) (Respirable) 14808-60-7	A2	Group 1	Known	
Titanium dioxide	-	Group 2B	-	

13463-67-7				

Reproductive toxicity
Product Information
• No information available
Component Information
• No information available

STOT - single exposure
No information available

STOT - repeated exposure
No information available

Other adverse effects
Product Information
• No information available
Component Information
• No information available

Aspiration hazard
Product Information
• No information available
Component Information
• No information available

12. Ecological information

12.1 Toxicity

Ecotoxicity No information available

5.0929 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	-
EINECS/ELINCS	-
ENCS	-
IECSC	-
KECL	-
PICCS	-
AICS	-
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances **IECSC**
- China Inventory of Existing Chemical Substances **KECL** -
Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Crystalline silica (Quartz) (Respirable) - 14808-60-7	Carcinogen
Titanium dioxide - 13463-67-7	Carcinogen
ASHES (RESIDUES) - 68131-74-8	Carcinogen
Aluminium magnesium silicate - 12174-11-7	Carcinogen
Benzophenone - 119-61-9	Carcinogen
N-(3,4-dichlorophenyl)-N,N-dimethylurea - 330-54-1	Carcinogen
Acetaldehyde - 75-07-0	Carcinogen
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive

1,4-DIOXANE - 123-91-1	Carcinogen
ETHYL ACRYLATE - 140-88-5	Carcinogen

16. Other information

NFPA	**Health Hazard** 0	**Flammability** 0	**Instability** 0	**Physical and chemical hazards** -
HMIS	**Health Hazard** 0	**Flammability** 0	**Physical Hazard** 0	**Personal protection** X

Legend:
ACGIH (American Conference of Governmental Industrial Hygienists)
Ceiling (C)
DOT (Department of Transportation)
EPA (Environmental Protection Agency)
IARC (International Agency for Research on Cancer)
International Air Transport Association (IATA)
International Maritime Dangerous Goods (IMDG)
NIOSH (National Institute for Occupational Safety and Health)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
Reportable Quantity (RQ)
Skin designation (S*)
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
TWA (time-weighted average)

Revision Date 01-Jun-2017
Revision Note
No information available
Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

DDP Specialty Electronic Materials US, LLC

Product name: Betafuse™ 656

Issue Date: 10/03/2023
Print Date: 03/21/2025

DDP Specialty Electronic Materials US, LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: Betafuse™ 656

Recommended use of the chemical and restrictions on use
Identified uses: Adhesives.

COMPANY IDENTIFICATION
DDP Specialty Electronic Materials US,
LLC
974 Centre Road, Building 730,
Wilmington DE 19805
UNITED STATES

Customer Information Number: 833-338-7668
SDSQuestion-NA@dupont.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 1-800-424-9300
Local Emergency Contact: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification
GHS classification in accordance with 29 CFR 1910.1200
Acute toxicity - Category 4 - Inhalation
Skin irritation - Category 2
Eye irritation - Category 2B
Respiratory sensitisation - Category 1
Skin sensitisation - Category 1
Reproductive toxicity - Category 1B
Specific target organ toxicity - single exposure - Category 3
Specific target organ toxicity - repeated exposure - Category 2 - Inhalation

Label elements
Hazard pictograms

Signal word: **DANGER!**

Hazards
Causes skin and eye irritation.
May cause an allergic skin reaction.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
May damage fertility or the unborn child.
May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary statements

Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
In case of inadequate ventilation wear respiratory protection.

Response
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.

Storage
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal
Dispose of contents/ container to an approved waste disposal plant.

Other hazards
No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CASRN	Concentration
Polyurethane resin	Not Hazardous	44.0 - 45.0 %
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9	26.0 - 27.0 %
Methylenebis(4-phenyl isocyanate)	101-68-8	>= 26.0 - <= 27.0 %
Dibutyltin Dilaurate	77-58-7	>= 0.1 - < 1.0 %
Benzyl butyl phthalate	85-68-7	2.0 - 3.0 %

4. FIRST AID MEASURES

Description of first aid measures
Inhalation: Remove to fresh air. In case of shortness of breath, give oxygen. Immediate medical attention is required.

Skin contact: Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use. Do not take clothing home to be laundered.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.

Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Call a physician immediately. If a person vomits when lying on his back, place him in the recovery position.

Most important symptoms and effects, both acute and delayed:
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed
Notes to physician: Bronchial constriction may develop after extensive exposure to isocyanates, even in individuals who have not been shown to be previously sensitized.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media: No data available

Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, irritating and highly toxic gases and/or fumes may be generated during combustion or decomposition.

Unusual Fire and Explosion Hazards: Do not allow run-off from fire fighting to enter drains or water courses. Closed containers may explode when heated or contents contaminated with water.

Advice for firefighters
Fire Fighting Procedures: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ventilate the area. Refer to protective measures listed in sections 7 and 8. MATERIAL IS A POTENTIAL SENSITIZER. No conditions to be specially mentioned.

Environmental precautions: Try to prevent the material from entering drains or water courses. Do not contaminate surface water.

Methods and materials for containment and cleaning up: Ventilate the area. Evacuate personnel to safe areas. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. For personal protection see section 8. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied.

Advice on general occupational hygiene
Keep container closed when not in use. Shower or bathe at the end of working.

Conditions for safe storage: Keep container tightly closed. Store in a cool, dry, well ventilated place.
Other data: This material is a potential skin sensitizer. See SECTION 8, Exposure Controls/Personal Protection, prior to handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value
Methylenebis(4-phenyl isocyanate)	DUPONT AEL	AEL * Vapour	2.5 Parts per billion

	DUPONT AEL	AEL * Vapour	20 Parts per billion
	DUPONT AEL	AEL * particulate	0.025 mg/m3
	ACGIH	TWA	0.005 ppm
	Further information: resp sens: Respiratory sensitization		
	CAL PEL	PEL	0.051 mg/m3 0.005 ppm
	OSHA Z-1	C	0.2 mg/m3 0.02 ppm
	Further information: (b): The value in mg/m3 is approximate.; ©: Ceiling limit is to be determined from breathing-zone air samples.		
	OSHA P0	C	0.2 mg/m3 0.02 ppm
Dibutyltin Dilaurate	OSHA Z-1	TWA	0.1 mg/m3 , Tin
	ACGIH	TWA	0.1 mg/m3 , Tin
	Further information: Central nervous system; immune eff: Immune effects; URT irr: Upper Respiratory Tract irritation; headache: Headache; eye irr: Eye irritation; nausea: Nausea; A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption; varies: varies		
	ACGIH	STEL	0.2 mg/m3 , Tin
	Further information: Central nervous system; immune eff: Immune effects; URT irr: Upper Respiratory Tract irritation; headache: Headache; eye irr: Eye irritation; nausea: Nausea; A4: Not classifiable as a human carcinogen; Skin: Danger of cutaneous absorption; varies: varies		
	CAL PEL	PEL	0.1 mg/m3 , Tin
	Further information: S: Skin		
	CAL PEL	STEL	0.2 mg/m3 , Tin
	Further information: S: Skin		
Benzyl butyl phthalate	Dow IHG	TWA	1 mg/m3
	Dow IHG	STEL	2 mg/m3

Exposure controls
Engineering measures: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer tothe current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Hygiene measures: Keep container closed when not in use. Shower or bathe at the end of working.

Individual protection measures
Eye/face protection: Tightly fitting safety goggles Eye protection worn must be compatible with respiratory protection system employed.
Skin protection
Hand protection: Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): 4H Glove (Trademark of Safety 4 A/S of Denmark) butyl-rubber Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Before removing gloves clean them with soap and water. NOTE: Material is a possible skin sensitizer.
Other protection: Avoid all skin contact. Selection of specific personal protective equipment such as long sleeves, safety glasses with side shields, face shield, safety shoes, boots, apron, or full body suit will depend on the task.
Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Above the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	clear liquid
Color	brown
Odor	sweet
Odor Threshold	No data available
pH	Not applicable
Melting point/range	No data available
Freezing point	No data available
Boiling point (760 mmHg)	No data available
Flash point	>200 °C (392 °F) *SETAFLASH CLOSED CUP*
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability (solid, gas)	Not Applicable
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapor Pressure	No data available
Relative Vapor Density (air = 1)	Not available
Relative Density (water = 1)	1.15
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	4,800 mPa.s
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Liquid Density	1.15 g/cm3
Molecular weight	approximately2,500 g/mol
Percent volatility	0 %

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: No data available

Possibility of hazardous reactions: Stable under recommended storage conditions. However, keep away from moisture, heat or flame.

Conditions to avoid: None known.

Incompatible materials: Avoid contact with the following: Water Strong acids Strong bases Strong Oxidizers

Hazardous decomposition products: Thermal decomposition may yield the following: isocyanate monomers Hydrogen cyanide (hydrocyanic acid)

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

Acute oral toxicity
Product test data not available. Refer to component data.

Acute dermal toxicity
Product test data not available. Refer to component data.

Acute inhalation toxicity
Product test data not available. Refer to component data.

Skin corrosion/irritation
Product test data not available. Refer to component data.

Serious eye damage/eye irritation
Product test data not available. Refer to component data.

Sensitization
Product test data not available. Refer to component data.

Specific Target Organ Systemic Toxicity (Single Exposure)
Product test data not available. Refer to component data.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Product test data not available. Refer to component data.

Carcinogenicity
Product test data not available. Refer to component data.

Teratogenicity
Product test data not available. Refer to component data.

Reproductive toxicity
Product test data not available. Refer to component data.

Mutagenicity
Product test data not available. Refer to component data.

Aspiration Hazard
Product test data not available. Refer to component data.

Additional information
No toxicity data are available for this material.

COMPONENTS INFLUENCING TOXICOLOGY:

Polyurethane resin

Acute oral toxicity
Single dose oral LD50 has not been determined.

Acute dermal toxicity
The dermal LD50 has not been determined.

Acute inhalation toxicity
The LC50 has not been determined.

Diphenylmethane Diisocyanate, isomers and homologues

Acute oral toxicity
Typical for this family of materials. LD50, Rat, > 10,000 mg/kg

Acute dermal toxicity
Typical for this family of materials. LD50, Rabbit, > 9,400 mg/kg

Acute inhalation toxicity
LC50, Rat, 4 Hour, dust/mist, 0.49 mg/l

For similar material(s): 4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8). LC50, Rat, 1 Hour, Aerosol, 2.24 mg/l

For similar material(s): 2,4'-Diphenylmethane diisocyanate (CAS 5873-54-1). LC50, Rat, 4 Hour, Aerosol, 0.387 mg/l

Skin corrosion/irritation
Prolonged contact may cause slight skin irritation with local redness.
May stain skin.

Serious eye damage/eye irritation
May cause moderate eye irritation.
May cause slight temporary corneal injury.

Sensitization
Skin contact may cause an allergic skin reaction.
Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

May cause allergic respiratory reaction.
MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Specific Target Organ Systemic Toxicity (Single Exposure)
May cause respiratory irritation.
Route of Exposure: Inhalation
Target Organs: Respiratory Tract

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

Carcinogenicity
Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

Teratogenicity
In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

Reproductive toxicity
No relevant data found.

Mutagenicity
Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

Methylenebis(4-phenyl isocyanate)

Acute oral toxicity
LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

Acute dermal toxicity
LD50, Rabbit, > 9,400 mg/kg

Acute inhalation toxicity
LC50, Rat, 1 Hour, dust/mist, 2.24 mg/l

Skin corrosion/irritation
Prolonged contact may cause moderate skin irritation with local redness.
Repeated contact may cause moderate skin irritation with local redness.
May stain skin.

Serious eye damage/eye irritation
May cause moderate eye irritation.
May cause slight temporary corneal injury.

Sensitization
Skin contact may cause an allergic skin reaction.

Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

May cause allergic respiratory reaction.
MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.
Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

Specific Target Organ Systemic Toxicity (Single Exposure)
May cause respiratory irritation.
Route of Exposure: Inhalation
Target Organs: Respiratory Tract

Specific Target Organ Systemic Toxicity (Repeated Exposure)
Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

Carcinogenicity
Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

Teratogenicity
Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Reproductive toxicity
No relevant data found.

Mutagenicity
Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

Dibutyltin Dilaurate

Acute oral toxicity
LD50, Rat, male and female, 2,071 mg/kg OECD Test Guideline 401

Acute dermal toxicity
LD50, Rat, male and female, > 2,000 mg/kg OECD Test Guideline 402 No deaths occurred at this concentration.

Acute inhalation toxicity
The LC50 has not been determined.

Skin corrosion/irritation
Prolonged contact may cause skin burns. Symptoms may include pain, severe local redness, swelling, and tissue damage.

Serious eye damage/eye irritation
May cause moderate eye irritation which may be slow to heal.
May cause slight corneal injury.
May cause permanent impairment of vision, even blindness.

Sensitization
For similar material(s):
Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Causes damage to organs.
Route of Exposure: Ingestion
Target Organs: thymus gland

Specific Target Organ Systemic Toxicity (Repeated Exposure)
For similar material(s):
In animals, effects have been reported on the following organs:
Thymus.
Blood.

Carcinogenicity
Similar material(s) did not cause cancer in laboratory animals.

Teratogenicity
For similar material(s): Has caused birth defects in laboratory animals.

Reproductive toxicity
For similar material(s): In animal studies, has been shown to interfere with fertility.

Mutagenicity
This material was not mutagenic in an Ames bacterial assay. For similar material(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative in some cases and positive in other cases.

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

Benzyl butyl phthalate

Acute oral toxicity
LD50, Rat, > 2,000 - 20,400 mg/kg

Acute dermal toxicity
LD50, Rabbit, > 10,000 mg/kg

Acute inhalation toxicity
LC50, Rat, 4 Hour, vapour, > 6.7 mg/l

Skin corrosion/irritation
Prolonged exposure not likely to cause significant skin irritation.

Serious eye damage/eye irritation

May cause slight temporary eye irritation.

Sensitization
Did not cause allergic skin reactions when tested in guinea pigs.
Did not cause allergic skin reactions when tested in humans.

For respiratory sensitization:
No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
In animals, effects have been reported on the following organs:
Bladder.
Kidney.
Liver.
Pancreas.
Spleen.
Male reproductive organs.
Thymus.

Carcinogenicity
Has caused cancer in some laboratory animals.

Teratogenicity
Has caused birth defects in laboratory animals only at doses toxic to the mother.

Reproductive toxicity
In animal studies, has been shown to interfere with fertility in males. In animal studies, has been shown to interfere with fertility in females. In animal studies, has been shown to interfere with reproduction in males. In animal studies, has been shown to interfere with reproduction in females.

Mutagenicity
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative in some cases and positive in other cases.

Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

General Information
There is no data available for this product.

Toxicity

Polyurethane resin

Acute toxicity to fish

No relevant data found.

Diphenylmethane Diisocyanate, isomers and homologues

Acute toxicity to fish
The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
Based on information for a similar material:
LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates
Based on information for a similar material:
EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants
Based on information for a similar material:
NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria
Based on information for a similar material:
EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

Toxicity to soil-dwelling organisms
EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

Toxicity to terrestrial plants
EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l
EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

Methylenebis(4-phenyl isocyanate)

Acute toxicity to fish
The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.
Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).
Based on information for a similar material:
LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates
Based on information for a similar material:
EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants
Based on information for a similar material:
NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria
Based on information for a similar material:
EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

Chronic toxicity to aquatic invertebrates
Based on data from similar materials
NOEC, Daphnia magna (Water flea), 21 d, 10 mg/l

Toxicity to soil-dwelling organisms
EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

Toxicity to terrestrial plants
EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l
EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

Dibutyltin Dilaurate

Acute toxicity to fish
Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).
LC50, Danio rerio (zebra fish), static test, 96 Hour, >3.1 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates
EC50, water flea Daphnia magna, Static, 48 Hour, <0.463 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants
EC50, Algae (Desmodesmus subspicatus), 72 Hour, Growth rate inhibition, >1 mg/l, OECD Test Guideline 201

Toxicity to bacteria
EC50, activated sludge, 3 Hour, Respiration rates., 1,000 mg/l, activated sludge test (OECD 209)

Benzyl butyl phthalate

Acute toxicity to fish
Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).
LC50, Fish, flow-through, 96 Hour, 0.51 mg/l
LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, 0.82 mg/l, OECD Test Guideline 203 or Equivalent

Acute toxicity to aquatic invertebrates
EC50, Daphnia magna, Static, 48 Hour, 0.97 mg/l
LC50, Mysid shrimp (Mysidopsis bahia), Static, 96 Hour, 0.9 mg/l

Acute toxicity to algae/aquatic plants
ErC50, Navicula pelliculosa (Freshwater diatom), 72 Hour, Growth rate, 0.66 mg/l, OECD Test Guideline 201 or Equivalent
NOEC, Navicula pelliculosa (Freshwater diatom), 72 Hour, Growth rate, 0.17 mg/l, OECD Test Guideline 201 or Equivalent

Chronic toxicity to fish
NOEC, Oncorhynchus mykiss (rainbow trout), 124 d, survival, 0.2 mg/l

Chronic toxicity to aquatic invertebrates
NOEC, saltwater mysid Mysidopsis bahia, 28 d, number of offspring, 0.075 mg/l
NOEC, Daphnia magna (Water flea), 21 d, number of offspring, 0.28 mg/l

Persistence and degradability

Polyurethane resin
Biodegradability: No relevant data found.

Diphenylmethane Diisocyanate, isomers and homologues
Biodegradability: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.
10-day Window: Not applicable
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302C or Equivalent

Methylenebis(4-phenyl isocyanate)
Biodegradability: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.
10-day Window: Not applicable
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302C or Equivalent

Dibutyltin Dilaurate
Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.
10-day Window: Fail
Biodegradation: 23 %
Exposure time: 39 d
Method: OECD Test Guideline 301F or Equivalent

Theoretical Oxygen Demand: 2.87 mg/mg

Benzyl butyl phthalate
Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).
10-day Window: Not applicable
Biodegradation: 81 %
Exposure time: 14 d
Method: OECD Test Guideline 301C or Equivalent
10-day Window: Not applicable
Biodegradation: > 99 %
Exposure time: 24 Hour
Method: OECD Test Guideline 302A or Equivalent

Theoretical Oxygen Demand: 2.25 mg/mg

Photodegradation
Test Type: Half-life (indirect photolysis)
Sensitization: OH radicals
Atmospheric half-life: 11.6 Hour
Method: Estimated.

Bioaccumulative potential

Polyurethane resin
Bioaccumulation: No relevant data found.

Diphenylmethane Diisocyanate, isomers and homologues
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.
Bioconcentration factor (BCF): 92 Cyprinus carpio (Carp) 28 d

Methylenebis(4-phenyl isocyanate)
Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.
Bioconcentration factor (BCF): 92 Cyprinus carpio (Carp) 28 d

Dibutyltin Dilaurate
Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
Partition coefficient: n-octanol/water(log Pow): 4.44 at 20.8 °C OECD Test Guideline 107
Bioconcentration factor (BCF): 813 Fish 7 d

Benzyl butyl phthalate
Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
Partition coefficient: n-octanol/water(log Pow): 4.91 OECD Test Guideline 107 or Equivalent
Bioconcentration factor (BCF): 9.4 Lepomis macrochirus (Bluegill sunfish) Measured

Mobility in soil

Polyurethane resin
No relevant data found.

Diphenylmethane Diisocyanate, isomers and homologues
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Methylenebis(4-phenyl isocyanate)
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Dibutyltin Dilaurate
No relevant data found.

Benzyl butyl phthalate

Potential for mobility in soil is high (Koc between 50 and 150).
Partition coefficient (Koc): 68 - 350 Estimated.

13. DISPOSAL CONSIDERATIONS

Disposal methods: Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations. (See 40 CFR 268)

Contaminated packaging: Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.(Methylene bisphenyl isocyanate (MDI), Benzyl butyl phthalate)
UN number	UN 3082
Class	9
Packing group	III
Reportable Quantity	Methylene bisphenyl isocyanate (MDI), Benzyl butyl phthalate

Classification for SEA transport (IMO-IMDG):

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Benzyl butyl phthalate)
UN number	UN 3082
Class	9
Packing group	III
Marine pollutant	Benzyl butyl phthalate
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.(Benzyl butyl phthalate)
UN number	UN 3082
Class	9
Packing group	III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container

volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitisation
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

Components	**CASRN**
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9
Methylenebis(4-phenyl isocyanate)	101-68-8

Pennsylvania
Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

California Prop. 65
WARNING: This product can expose you to chemicals including Benzyl butyl phthalate, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

United States TSCA Inventory (TSCA)
All components of this product are in compliance with the Active inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

Hazard Rating System
HMIS

Health	Flammability	Physical Hazard
2*	1	1

* = Chronic Effects (See Hazards Identification)

Revision
Identification Number: 10365791 / A749 / Issue Date: 10/03/2023 / Version: 5.1
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
AEL *	8 & 12 hr. TWA
C	Ceiling limit
CAL PEL	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Dow IHG	Dow Industrial Hygiene Guideline
DUPONT AEL	DuPont AEL (Acceptable Exposure Limit)
OSHA P0	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
PEL	Permissible exposure limit
STEL	Short-term exposure limit
TWA	8-hour time weighted average

Full text of other abbreviations
AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DDP Specialty Electronic Materials US, LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.
US

SAFETY DATA SHEET

1. Identification

Product identifier **Glass Mat Faced Gypsum Panels**

Product list

Product List A
DensArmor Plus® Interior Panel
DensArmor Plus® Fireguard® Abuse-Resistant Panels
DensArmor Plus® Fireguard® Impact-Resistant Panels
DensArmor Plus® Fireguard® Interior Panels
DensDeck® Prime Roof Board
DensDeck® Roof Board
DensDeck® Prime Fireguard® Roof Board
DensDeck® Fireguard® Roof Board
DensElement™ Sheathing
DensGlass® Fireguard® Sheathing
DensGlass® Shaftliner
DensGlass® Sheathing
DensShield® Fireguard® Tile Backer
DensShield® Tile Backer

Product List B
DensArmor Plus® Fireguard C® Interior Panels

Other means of identification

Product code GP-71C

Recommended use Products accommodate a wide range of wall, floor, ceiling and roof applications.

Recommended restrictions Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Georgia-Pacific Gypsum LLC

Address 133 Peachtree Street, NE
Atlanta, GA 30303

Telephone Technical Information: 800.225.6119
(M)SDS Request: 404.652.5119

e-mail MSDSREQ@GAPAC.COM

Emergency phone number Chemtrec - Emergency: 800.424.9300

Importer/Supplier/ Distributor

Company name Georgia-Pacific Canada LP

Address 350 Argyle Street North
Caledonia, ON N3W 1M2

Telephone Technical Information: 800.225.6119
(M)SDS Request: 404.652.5119

e-mail MSDSREQ@GAPAC.com

Emergency phone number Chemtrec - Emergency: 800.424.9300

2. Hazard(s) identification

Emergency overview This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of dusts are described below.

Physical hazards Not classified.

Health hazards Eye irritation Category 2B

Environmental hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement Causes eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Observe good industrial hygiene practices.

Response Wash hands after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage Store away from acids.

Disposal Dispose of contents/container in accordance with applicable regulations.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	≤ 95
VERMICULITE**		1318-00-9	0 - 7
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	1 - 5
FIBROUS GLASS		65997-17-3	1 - 5

Composition comments ** Found in products in List B, Section 1 of this SDS.

Gypsum (calcium sulfate, dihydrate) and vermiculite contain naturally occurring crystalline silica (quartz) which is listed as a lung carcinogen. See Section 8 for exposure information.

*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove and isolate contaminated clothing and shoes. For skin contact, wash immediately with soap and water. Get medical attention if symptoms occur. Get medical attention if irritation develops and persists. For minor skin contact, avoid spreading material on unaffected skin.

Eye contact Do not rub the eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion Rinse mouth. May result in obstruction and irritation if ingested. Get medical attention.

Most important symptoms/effects, acute and delayed Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid inhalation of dust from the spilled material. In the case of dust or aerosol formation use respirator with an approved filter. Use personal protection recommended in Section 8. Keep unnecessary personnel away.
Methods and materials for containment and cleaning up	Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
Environmental precautions	Keep out of drains, sewers, ditches, and waterways.

7. Handling and storage

Precautions for safe handling	Provide appropriate exhaust ventilation at places where dust is formed. Minimise dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Observe good industrial hygiene practices. Use only in well-ventilated areas. Do not eat or drink while using the product. Wash hands before eating, drinking or smoking.
Conditions for safe storage, including any incompatibilities	Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
FIBROUS GLASS (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m3, non-standard units

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
FIBROUS GLASS (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Fiber, total
		5 mg/m3	Total particulate.
VERMICULITE** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	Total particulate.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	STEL	20 mg/m3	Total dust.
	TWA	10 mg/m3	Inhalable
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fibers.
VERMICULITE** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
FIBROUS GLASS (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fraction.

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.5 fibers/mL	Respirable fibers.
		5 mg/m3	Inhalable fraction.
VERMICULITE** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.

Canada. Quebec OELs. (Ministry of Labour - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3	Respirable dust.
		10 mg/m3	Total dust.

Canada. Quebec OELs. (Ministry of Labour - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.
FIBROUS GLASS (CAS 65997-17-3)	TWA	1 fibers/cm3n	Fiber.
		10 mg/m3	Total dust.
VERMICULITE** (CAS 1318-00-9)	TWA	10 mg/m3	Total dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

Appropriate engineering controls Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL (occupational exposure limit), suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses or goggles are recommended when using this product. Eye wash fountain is recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Safety shower/eye wash fountain is recommended in the workplace area.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards Not applicable.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Keep away from food and drink.

9. Physical and chemical properties

Appearance Gypsum boards

Physical state Solid.

Form Solid

Colour Facing color varies

Odour Low odor

Odour threshold Not available.

pH 6 - 8

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit – upper (%)	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	0.2 % @ 22°C
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Other information	
Flash point class	Not flammable
Specific gravity	2.2 - 2.4

10. Stability and reactivity

Reactivity	Contact with strong acids produces carbon dioxide.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Strong acids.
Hazardous decomposition products	May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis
Eye contact	Dust in the eyes will cause irritation.
Ingestion	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Product	**Species**	**Test results**
Glass Mat Faced Gypsum Panels		
Acute		
Oral		
LD50	Rat	1664 mg/kg estimated
Components	**Species**	**Test results**
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
Acute		
Oral		
LD50	Rat	> 1581 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Dust in the eyes will cause irritation.

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant

FIBROUS GLASS (CAS 65997-17-3)	Irritant

Respiratory sensitisation Not likely to cause respiratory sensitization.

Skin sensitisation This product is not expected to cause skin sensitisation.

Germ cell mutagenicity Not classified.

Carcinogenicity Not expected to be hazardous by OSHA/WHMIS criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure

ACGIH Carcinogens

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	A2 Suspected human carcinogen.
FIBROUS GLASS (CAS 65997-17-3)	A2 Suspected human carcinogen. A3 Confirmed animal carcinogen with unknown relevance to humans. A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	Suspected human carcinogen.
FIBROUS GLASS (CAS 65997-17-3)	Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	Suspected human carcinogen.
FIBROUS GLASS (CAS 65997-17-3)	Confirmed animal carcinogen with unknown relevance to humans. Not classifiable as a human carcinogen. Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	Suspected carcinogenic effect in humans.
FIBROUS GLASS (CAS 65997-17-3)	Detected carcinogenic effect in animals.

IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	1 Carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	Known To Be Human Carcinogen.

Reproductive toxicity Not classified.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified.

Chronic effects Not hazardous under normal conditions of use.

Further information *Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded

12. Ecological information

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment. Not considered to be harmful to aquatic life.

Components		Species	Test results
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)			
Aquatic			
Acute			
Fish	LC50	Zebra danio (Danio rerio)	> 10000 mg/l, 96 Hours OECD SIDS
FIBROUS GLASS (CAS 65997-17-3)			
Aquatic			
Acute			
Fish	LC50	Fish	> 1000 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Not available.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)
FIBROUS GLASS (CAS 65997-17-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 03-24-2017

Version No. 01

Further information HMIS® is a registered trade and service mark of the NPCA.

Disclaimer This SDS is intended to quickly provide useful information to the user(s) of this material or product It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

Revision information

Product and Company Identification: Synonyms
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Toxicological Information: Toxicological Data
Ecological Information: Ecotoxicity
HazReg Data: International Inventories
GHS: Classification

GRABBER CONSTRUCTION PRODUCTS "The Professional's Choice"™

SAFETY DATA SHEET

Date of issue: 09/01/2019

Section 1: Identification

Trade name: GRABBER Screws, Nails and Staples

Product code: Various

Product category: Mechanical Fasteners

Manufacturer/Supplier: Grabber Construction Products, Inc. 5255 West 11000 North Highland, Utah
1-800-477-TURN www.GrabberPro.com

Emergency telephone number: 1-801-492-3880

Section 2: Hazard(s) Identification

General Information: Fastener products are deemed "Articles" and are exempt from Safety Data Sheet (SDS) requirements under the Hazard Communication Standard – 29 CFR 1910.1200(b)(6)(v) – see below. ARTICLE: For the purpose of hazard communication, fastener products are "Articles" as defined in 29 CFR 1910.1200(c): Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

As "Articles," neither a Safety Data Sheet (SDS) nor a GHS-Compliant label is required for these products. This SDS is provided to our customers as a voluntarily-offered resource of limited information to promote safe handling and proper use of our products; and as a courtesy and service.

Classification(s): Under normal-use conditions, our mechanical fastener products are not expected to pose any health or safety hazards and does not meet the criteria for GHS Classification. However, unlikely conditions of welding, grinding, brazing, cutting, etc. may create dust and Particulate-Matter (PM) pollution that may cause health hazards. Improper use of mechanical anchors may result in safety hazards.

GHS Physical Hazard and Health Hazard Classifications: None applicable

Physical Hazards Not Otherwise Classified: None

Health Hazards Not Otherwise Classified: None

Symbol(s):

Signal Word(s): WARNING! (see *Sections 11 and 15*)

Hazard Statement(s): see *Sections 11 and 15*

Precautionary Statement(s): *Prop 65 WARNING Label as specified in Section 15*

Section 3: Composition/information on ingredients

This product is composed of various metals, and may have ferrous or non-ferrous plating

Section 4: First-Aid Measures

General Information: Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Exposure Risk: Routes of Exposure

Irritant effects: Symptoms include itching, burning, redness, tearing, and blurred vision; discomfort in the chest, shortness of breath, coughing.

Eye Contact: If experiencing eye irritation due to dust, flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If you experience redness, burning, blurred vision, or swelling, consult a physician.

Skin Contact: If experiencing skin irritation, wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation occurs consult a physician.

Ingestion: Rinse mouth immediately. Do not induce vomiting. Consult a physician.

Inhalation: Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to have trouble breathing, consult a physician.

Section 5: Fire-Fighting Measures

Extinguishing Media: None Applicable

Fire and Explosion Hazards: In the form of a solid alloy, this product will not burn.

Firefighting Instructions: None Applicalbe

Section 6: Accidental Release

Methods and Materials: None Applicable

Personal Precautions: None Applicable

Environmental Precautions: None Applicable

Section 7: Handling and

Wear appropriate personal protective equipment. Avoid generating dust. If grinding or cutting, use work methods which minimize dust production. Avoid inhalation of dust. Ensure adequate ventilation. When using, do not eat, drink, or smoke. Wash hands thoroughly after handling.
Storage

Store in a closed container away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Protective Measure:	Wear appropriate personal protective equipment. Protective coatings are used on some mechanical anchors. Typically, this will be commercial zinc, zinc plating with chromate conversion coating, hot dipped galvanizing, ceramic plating, or mechanically galvanized plating. This information should be considered when evaluating employee personal protective equipment.
Eye Protection:	Wear goggles or safety glasses.
Hand Protection:	Gloves recommended.
Skin and Body Protection:	Wear long sleeve shirt/long pants and other clothing as required to minimize contact. In case of dust production, wear dust-proof clothing.
Respirator Protection:	Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.
General Hygiene:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Engineering Controls:	Use outdoors or ensure good ventilation when working indoors. Provide eyewash station and emergency shower.
Exposure Limits:	No exposure limits noted for ingredients.

Section 9: Physical and Chemical Properties

Physical State: Solid
Form: Solid
Color: Gray/Various Colors
Odor: None
Odor Threshold: N/A
pH: N/A
Flammability: N/A
Vapor Pressure: N/A
Solubility: N/A
Decomposition: N/A
Freezing/Melting Point: 2700°F (1500°C)

Boiling Point: N/A
Flash Point: N/A
Evaporation Rate: N/A
Specific Gravity: N/A
VOC: N/A
U/L Flammability: N/A
Vapor Density: N/A
Oil-Water Partition Coefficient: N/A
Viscosity: N/A

Section 10: Stability and Reactivity

Reactivity:	Stable and non-reactive under normal conditions of use and storage.
Chemical Stability:	Stable and non-reactive under normal conditions of use and storage.
Conditions to Avoid:	None known.
Substances to Avoid:	Strong oxidizers. Strong acids and bases.
Hazardous Reactions:	Hazardous polymerization will not occur.
Decomposition Products:	Carbon dioxide, carbon monoxide, oxides of nitrogen, other organic compounds. Thermal oxidative decomposition of galvanized steel products.

Section 11: Toxicological Information

LD50 Oral and LD50 Dermal and LC50: Not applicable to this form of product

Ingredients Toxicology Data: Carbon (C), Iron (Fe), Manganese (Mn), Phosphorus (P), Sulfur (S), Nickel (Ni), Silicon (Si), Chromium (Cr), and Zinc (Zn).

Primary Route(s) of Entry: None applicable.

Eye Hazards: None applicable.

Skin Hazards: None applicable.

Ingestion Hazards: None applicable.

Inhalation Hazards: None applicable.

Symptoms Related to Overexposure: None applicable.

Delayed Effects from Long Term Overexposure: None applicable.

Carcinogenicity: Stainless Steel and Yellow Zinc coatings - Nickel and Hexavalent Chromium are known to cause cancer (see *Section 15* for *Regulatory Information*).

Germ Cell Mutagenicity: Zinc Coatings only - Hexavalent Chromium is known to cause reproductive harm (see Section 15 for Regulatory Information).

Reproductive Toxicity: Zinc Coatings only - Hexavalent Chromium is known to cause reproductive harm (see *Section 15* for *Regulatory Information*).

Acute Toxicity Estimates: Not applicable

Interactive effects of components: Not applicable

Section 12: Ecological Information (non-mandatory)

No data available for Aquatic Toxicity to Fish, Invertebrates, Plants, or Microorganisms, Toxicity to Terrestrial Animals, Toxicity to Terrestrial Plants, Persistence and Biodegradability, Bioaccumulation Potential, or Mobility in Soil.

This product contains no ingredients known to deplete the ozone layer.

Section 13: Disposal Considerations

Waste Disposal of Substance: Do not allow material into sewers/water supplies.

Do not contaminate ponds, waterways or ditches.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Steel scrap should be recycled whenever possible.

Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be disposed of in accordance with local/regional/national/international regulations.

Section 14: Transport Information

Not Applicable

Section 15: Regulatory Information

Federal Regulations: This product is an "Article" as defined by the OSHA Hazard Communication standard, 29 CFR 1910.1200 and is deemed exempt.

Canadian Regulatory Information: None applicable to the form of product.

Zinc coatings only: California Proposition 65 Information:

WARNING: These products can expose you to chemicals, including hexavalent chromium, which is known in the State of California to cause cancer and reproductive harm. For more information, go to http://www.p65warnings.ca.gov.

Stainless Steel only: California Proposition 65 Information:

WARNING: These products can expose you to chemicals, including nickel, which is known in the State of California to cause cancer and reproductive harm. For more information, go to http://www.p65warnings.ca.gov.

Section 16: Other Information

Hazardous Materials Information System (HMIS III) Ratings: Not applicable to the form of product.

Personal Protective Equipment: None required under anticipated conditions of use.

National Fire Protection Association (NFPA) Ratings: Not applicable to the form of product.

Publication Date: 1 September 2019 - Revision Date: Not applicable - Date of Prior SDS: Not applicable.

DISCLAMIMER: As "Articles," neither a Safety Data Sheet (SDS) nor a GHS-Compliant label is required for these products. This SDS is provided to our customers as a voluntarily-offered resource of limited information to promote safe handling and proper use of our products; and as a courtesy and service.

Dolomitic Hydrated Lime

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Issue date: 2022-10-18
Revision date: 2023-11-20
Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Dolomitic Hydrated Lime
Product code	:	Not available
Product type	:	Solid
Other means of identification	:	KEMIDOL Hydrate, Type N; Type S; Dolomitic Hydrated Agricultural Lime; SUPER LIMOID S Mason's Lime; MORTASEAL Autoclaved Masons Lime; IVORY Autoclaved Finish Lime; SNOWDRIFT Autoclaved Finish Lime; CANADIAN SNOWDRIFT Autoclaved Finish Lime; KEMIDOL Superhydrate; KEMIDOL Superhydrate; ALKA 240; Dolomitic Hydrated Spray Lime; Dolomitic Hydrated Lime, 10# bag; Dolomitic Hydrated Lime, 25# bag; DAP Dolomitic Hydrated Lime; BONDCRETE Mason's & Stucco Lime; SUPER LIMOID SA Mason's & Stucco Lime; GRAND PRIZE Hydrated Finish Lime; RED TOP Finish Lime; WESTERN MIRACLE Lime; WESTERN FINISHING Lime; WESTERN American Masonry; WESTERN LIMATE; WESTERN Mason's Lime

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	Neutralization, flocculation, stabilization, polishing, masonry mortar, plaster, stucco, fresco paints and lime wash.

1.3. Supplier

Manufacturer
GRAYMONT
#200-10991 Shellbridge Way
Richmond, BC V6X 3C6 - Canada
T 1 604 207-4292 - F 1 604 207-9014

Distributor
Graymont Western US Inc
585 W Southridge Way
Sandy, Utah 84070 - United States
T +1 801-262-3942

1.4. Emergency telephone number

Emergency number	:	CHEMTREC, US (800-424-9300), INTERNATIONAL: (703-527-3887)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 1
Carcinogenicity Category 1A
Specific target organ toxicity – Single exposure, Category 3
Specific target organ toxicity – Repeated exposure, Category 1

2.2. GHS Label elements, including precautionary statements

GHS labelling

Hazard pictograms (GHS) :

Signal word (GHS) : Danger

Hazard statements (GHS)	:	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May cause cancer (Inhalation). Causes damage to organs (lungs) through prolonged or repeated exposure.
Precautionary statements (GHS)	:	Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
Calcium hydroxide	Calcium hydroxide Calcium dihydroxide / Calcium hydroxide (Ca(OH)2) / Hydrated lime / Lime, hydrated / CALCIUM HYDROXIDE / Slaked lime	CAS-No.: 1305-62-0	50 – 75
Magnesium oxide (MgO)	Magnesium oxide (MgO) Calcined magnesite / Magnesium oxide / MAGNESIUM OXIDE / Magnesia	CAS-No.: 1309-48-4	50 – 75
Quartz	Quartz Quartz (SiO2) / Silica, crystalline, quartz / Crystalline silica, quartz / .alpha.-Quartz / Silica, crystalline, .alpha.-quartz / QUARTZ / Crystalline silica in the form of quartz / Quartz, silica / Quartz (respirable fraction) / Silica dust / Silica, crystalline-.alpha.quartz / Silica, .alpha.-quartz / Silicon dioxide / Silica, quartz / Silica, crystalline / Quartz (crystalline silica) / Silica dust, crystalline / QUARTZ POWDER / Silica, crystalline (quartz)	CAS-No.: 14808-60-7	0.0001 – 1

Comments : Crystalline silica has been found in some products at or above detection level 0.1%. Concentration is dependent upon limestone source.

Any concentration shown as a range is to protect confidentiality or is due to batch variation. If a generic chemical name is shown and/or the CAS number is not disclosed, the specific chemical identity has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. May cause burns in the presence of moisture. Symptoms may include redness, drying, defatting and cracking of the skin. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : None.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. . Provide ventilation. Avoid dust formation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Do not breathe dust. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Avoid generating dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended. Good housekeeping is important to prevent accumulation of dust. Ensure adequate natural or mechanical ventilation in the form local or general exhaust ventilation is in use to ensure exposure is below established regulatory limits. If ventilation is not adequate, use respiratory protection in the form of a CSA/NIOSH- Approved Particulate Filtering Facepiece Respirators such as an N95 respirator or equivalent.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a well-ventilated place. Store in dust-tight, dry, labelled containers. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Calcium hydroxide (1305-62-0)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	5 mg/m³

Calcium hydroxide (1305-62-0)	
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWAEV)	5 mg/m³
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	5 mg/m³
OEL STEL	10 mg/m³
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	5 mg/m³
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Magnesium oxide (MgO) (1309-48-4)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (fume)
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWAEV)	10 mg/m³ (inhalable dust)

Magnesium oxide (MgO) (1309-48-4)	
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (fume, inhalable) 3 mg/m³ (respirable dust and fume)
OEL STEL	10 mg/m³ (respirable dust and fume)
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable particulate matter)
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable fraction)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable particulate matter)
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable particulate matter)
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable fraction)
OEL STEL	20 mg/m³ (inhalable fraction)
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable fraction)
OEL STEL	20 mg/m³ (inhalable fraction)
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable particulate matter)
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable particulate matter)
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable fraction)
OEL STEL	20 mg/m³ (inhalable fraction)
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (fume)
OEL STEL	10 mg/m³ (fume)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m³ (inhalable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	15 mg/m³ (fume, total particulate)

Quartz (14808-60-7)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Silica-Crystalline: Quartz
OEL TWA	0.025 mg/m³ (respirable particulate)
Notations and remarks	Carcinogenicity A2

Quartz (14808-60-7)	
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Silica - Crystalline, Quartz
VEMP (OEL TWAEV)	0.1 mg/m³ (respirable dust)
Notations and remarks	C2, EM
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Silica, Crystalline - alpha quartz
OEL TWA	0.025 mg/m³ (respirable)
Notations and remarks	ACGIH Carcinogenicity category A2; IARC group 1 carcinogen
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
OEL TWA	0.025 mg/m³ (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	0.025 mg/m³ (respirable fraction)
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
OEL TWA	0.025 mg/m³ (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
OEL TWA	0.025 mg/m³ (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Silica - Crystalline: Quartz
OEL TWA	0.05 mg/m³ (Trydimite removed-respirable fraction (Silica - crystalline)
Notations and remarks	Designated substance
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Silica - Crystalline: Quartz
OEL TWA	0.05 mg/m³ (Trydimite removed-respirable fraction (Silica - crystalline)
Notations and remarks	Designated substance

Quartz (14808-60-7)	
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Silica, Crystalline - Quartz
OEL TWA	0.1 mg/m³ (designated substances regulation-respirable fraction (Silica, crystalline)
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
OEL TWA	0.025 mg/m³ (respirable particulate matter)
Notations and remarks	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2023
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Silica - Crystalline: Quartz
OEL TWA	0.05 mg/m³ (Trydimite removed-respirable fraction (Silica - crystalline (Trydimite removed))
Notations and remarks	Designated Chemical Substance
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10
Canada (Yukon) - Occupational Exposure Limits	
OEL TWA	300 particle/mL (Silica - Quartz, crystalline)
USA - ACGIH - Occupational Exposure Limits	
Local name	Silica crystaline - quartz
ACGIH OEL TWA	0.025 mg/m³ (respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
ACGIH chemical category	Suspected Human Carcinogen
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL TWA [1]	50 µg/m³ (Respirable crystalline silica)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves resistant to chemical penetration

Eye protection:
Wear eye/face protection

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Powder.
Colour	:	White
Odour	:	Sweet
Odour threshold	:	No data available
pH	:	12.45 saturated solution at 25°C / 77 °F
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	Not applicable
Relative evaporation rate (butylacetate=1)	:	No data available
Flammability	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C / 68 °F	:	Not applicable
Relative density	:	2.2 – 2.6
Solubility	:	Water: 0.1 g/100ml at 20°C / 68 °F
Partition coefficient n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	345 °C / 653 °F
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive limits	:	Not applicable
Explosive properties	:	No data available
Oxidising properties	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Oxidizing materials. Strong acids. Reactive materials.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.
Acute toxicity (dermal) : Not classified.
Acute toxicity (inhalation) : Not classified.

Calcium hydroxide (1305-62-0)	
LD50 oral rat	7340 mg/kg
LD50 dermal rat	> 2500 mg/kg
LC50 inhalation rat	> 6.04 mg/l/4h
ATE CA (oral)	7340 mg/kg bodyweight

Magnesium oxide (MgO) (1309-48-4)	
LD50 oral rat	3870 mg/kg
ATE CA (oral)	3870 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
pH: 12.45 saturated solution at 25°C / 77 °F
Serious eye damage/irritation : Causes serious eye damage.
pH: 12.45 saturated solution at 25°C / 77 °F
Respiratory or skin sensitisation : Not classified.
Germ cell mutagenicity : Not classified.
Carcinogenicity : May cause cancer if inhaled. Risk of cancer depends on duration and level of exposure.

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified.
STOT-single exposure : May cause respiratory irritation.

Calcium hydroxide (1305-62-0)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Quartz (14808-60-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified.

Dolomitic Hydrated Lime	
Viscosity, kinematic	Not applicable

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. May cause burns in the presence of moisture. Symptoms may include redness, drying, defatting and cracking of the skin. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No known significant effects or critical hazards.

12.2. Persistence and degradability

Dolomitic Hydrated Lime	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Dolomitic Hydrated Lime	
Partition coefficient n-octanol/water	Not applicable
Bioaccumulative potential	Not established.
Calcium hydroxide (1305-62-0)	
BCF - Fish [1]	(no bioaccumulation)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not applicable

TDG
Transport hazard class(es) (TDG) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

DOT
No data available

TDG
No data available

IMDG
No data available

IATA
No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

15.3. US State regulations

⚠ WARNING: This product can expose you to Silica, respirable crystalline, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Calcium hydroxide(1305-62-0)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Magnesium oxide (MgO)(1309-48-4)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List
Quartz(14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Revision date : 2023-11-20

Other information : None.

Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

NEXREG

Full text of H-statements	
Carc. 1A	Carcinogenicity, Category 1A
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Indication of changes:
Handling & storage

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Gold Bond® Shaftliner XP®

SDS01002

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Gold Bond® Shaftliner XP®

IDENTIFIERS

Gold Bond® Shaftliner XP®

OTHER MEANS OF IDENTIFICATION

Wallboard, Gypsum Board, Plasterboard, Drywall

RECOMMENDED USE

Interior building walls, elevator shaft construction, Area Separation Wall Systems. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: **goldbondbuilding.com**

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not classified

PICTOGRAM

None

SIGNAL WORD

None

HAZARD STATEMENTS

None

PRECAUTIONARY STATEMENTS
PREVENTION

Do not breathe dust.

Use personal protective equipment as required. (See Section 8).

Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

Gold Bond® Building Products

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	
Acid Modified Corn Starch	Starch	65996-63	<3	
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<4	Mixture-calcium, aluminum silicates, amorphous silica

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO_2) and oxides of carbon.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Store panels flat to minimize damage and warping. Do not stack panels too high when storing to minimize the risk of falling.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters **Exposure Limits**

COMPONENT	OSHA PEL mg/m³	ACGIH TLV mg/m³
Calcium Sulfate Dihydrate	15(T) 5(R)	10(T)
Crystalline Silica[1]	[(10) / (%SiO2+2)](R) [(30) / (%SiO2+2)] (T)	0.025(R)
Cellulose	15(T) 5(R)	10(T)

T - Total Dust R - Respirable Dust *1 - Present as an impurity in raw materials.*

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance:** PURPLE® paper-faced gypsum board with white/gray core
b. **Odor:** None
c. **Odor threshold:** Not available
d. **pH:** ~7
e. **Melting point/freezing point:** Not Available
f. **Initial boiling point and boiling range:** Not Available
g. **Flash point:** Not available
h. **Evaporation rate:** Not available
i. **Flammability (solid, gas):** Not flammable
j. **Upper/lower flammability or explosive limits:** Not available
k. **Vapor pressure:** Not available
l. **Vapor density:** Not available
m. **Relative density:** 2.3 g/cc
n. **Solubility(ies):** 2.1 g/L @ 20° C
o. **Partition coefficient: n-octanol/water:** Not available
p. **Auto-ignition temperature:** Not available
q. **Decomposition temperature:** 1450°C
r. **Viscosity:** Not available
s. **Volatile organic compound (VOC) content:** None

SECTION 10: STABILITY AND REACTIVITY

a. **Reactivity:** No data available
b. **Chemical stability:** Stable in dry environments
c. **Possibility of hazardous reactions:** None known
d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
e. **Incompatible materials:** None
f. **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO_2) and various oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)

SKIN CORROSION/IRRITATION

Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

There is no indication of skin sensitization in guinea pigs [OECD TG 406].

RESPIRATORY SENSITIZATION

Not available

SENSITIZATION

Not available

MUTAGENICITY

No evidence of mutagenicity on Ames Test.

CARCINOGENICITY

Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS
Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE
Not available

ASPIRATION TOXICITY
Not available

SECTION 12: ECOLOGICAL INFORMATION

a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
b. **Persistence and degradability:** Unknown
c. **Bioaccumulative potential:** Gypsum is a naurally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
d. **Mobility in soil:** Unknown
e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

Canada WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

IICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

National Gypsum

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

Gold Bond Building Products

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
goldbondbuilding.com

Gold Bond® XP® Gypsum Board

SDS01003

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Gold Bond® XP® Gypsum Board

IDENTIFIERS

1/2" Gold Bond® XP® Gypsum Board

5/8" Gold Bond® XP® Fire-Shield® Gypsum Board

3/4" Gold Bond® XP® Ultra-Shield FS® Gypsum Board

5/8" Gold Bond® EVOLVE XP™ Fire-Shield® Gypsum Board

5/16" Gold Bond® XP® Fire-Shield® Radius Gypsum Board

OTHER MEANS OF IDENTIFICATION

Wallboard, Gypsum Board, Plasterboard, Drywall

RECOMMENDED USE

Interior building walls and ceilings. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: **goldbondbuilding.com**

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not classified

PICTOGRAM

None

SIGNAL WORD

None

HAZARD STATEMENTS

None

PRECAUTIONARY STATEMENTS
PREVENTION

Do not breathe dust.

Use personal protective equipment as required. (See Section 8).

Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

Gold Bond® Building Products

STORAGE
Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL
Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	
Hydrous phyllosilicate	Vermiculite	1318-00-9	<5	Crystalline silica (CAS # 14808-60-7)
Acid Modified Corn Starch	Starch	65996-63-6	<3	
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<4	Mixture-calcium, aluminum silicates, amorphous silica

SECTION 4: FIRST-AID MEASURES

INHALATION
Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT
Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT
Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION
This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA
Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE
None known. Above 1450° C, material can decompose and release sulfur dioxide (SO_2) and oxides of carbon.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS
A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
No special precautions required.

General recommendations:
Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS
This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Store panels flat to minimize damage and warping. Do not stack panels too high when storing to minimize the risk of falling.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters **Exposure Limits**

COMPONENT	OSHA PEL mg/m³	ACGIH TLV mg/m³
Calcium Sulfate Dihydrate	15(T) 5(R)	10(T)
Crystalline Silica[1]	[(10) / (%SiO2+2)](R) [(30) / (%SiO2+2)] (T)	0.025(R)
Cellulose	15(T) 5(R)	10(T)

T - Total Dust R - Respirable Dust *1 - Present as an impurity in raw materials.*

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance:** PURPLE® paper-faced gypsum board with white/gray core
b. **Odor:** None
c. **Odor threshold:** Not available
d. **pH:** ~7
e. **Melting point/freezing point:** Not Available
f. **Initial boiling point and boiling range:** Not Available
g. **Flash point:** Not available
h. **Evaporation rate:** Not available
i. **Flammability (solid, gas):** Not flammable
j. **Upper/lower flammability or explosive limits:** Not available
k. **Vapor pressure:** Not available
l. **Vapor density:** Not available
m. **Relative density:** 2.3 g/cc
n. **Solubility(ies):** 2.1 g/L @ 20° C
o. **Partition coefficient: n-octanol/water:** Not available
p. **Auto-ignition temperature:** Not available
q. **Decomposition temperature:** 1450°C
r. **Viscosity:** Not available
s. **Volatile organic compound (VOC) content:** None

SECTION 10: STABILITY AND REACTIVITY

a. **Reactivity:** No data available
b. **Chemical stability:** Stable in dry environments
c. **Possibility of hazardous reactions:** None known
d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
e. **Incompatible materials:** None
f. **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO_2) and various oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)

SKIN CORROSION/IRRITATION

Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

There is no indication of skin sensitization in guinea pigs [OECD TG 406].

RESPIRATORY SENSITIZATION

Not available

SENSITIZATION

Not available

MUTAGENICITY

No evidence of mutagenicity on Ames Test.

CARCINOGENICITY

Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS
Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE
Not available

ASPIRATION TOXICITY
Not available

SECTION 12: ECOLOGICAL INFORMATION

a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
b. **Persistence and degradability:** Unknown
c. **Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
d. **Mobility in soil:** Unknown
e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

Canada WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

IICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

National Gypsum

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

Gold Bond® Building Products

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
goldbondbuilding.com

Gold Bond® eXP® Shaftliner

SDS01007

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Gold Bond® eXP® Shaftliner

IDENTIFIERS

Gold Bond® eXP® Shaftliner

OTHER MEANS OF IDENTIFICATION

Gypsum Board, Plasterboard, Drywall, Area Separation Wall, Shaftwall, Liner Board, Mold and Moisture Resistant

RECOMMENDED USE

Interior shafts and stairwells, and area separation walls where moisture is a concern. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: goldbondbuilding.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not classified

PICTOGRAM

None

SIGNAL WORD

None

HAZARD STATEMENTS

None

PRECAUTIONARY STATEMENTS
PREVENTION

Do not breathe dust.

Use personal protective equipment as required. (See Section 8).

Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

Gold Bond® Building Products

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>91	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<1	Mixture-calcium, aluminum silicates, amorphous silica

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO_2) and oxides of carbon.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No special precautions required.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Store panels flat to minimize damage and warping. Do not stack panels too high when storing to minimize the risk of falling.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters **Exposure Limits**

COMPONENT	OSHA PEL mg/m³	ACGIH TLV mg/m³
Calcium Sulfate Dihydrate	15(T) 5(R)	10(T)
Crystalline Silica[1]	[(10) / (%SiO2+2)](R) [(30) / (%SiO2+2)] (T)	0.025(R)
Vermiculite	15(T) 5(R)	10(T)
Fiberglass, synthetic, vitreous, continuous	15(T) 5(R)	1 f/cc(R)
T - Total Dust R - Respirable Dust	*1 - Present as an impurity in raw materials.*	

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance:** PURPLE® coated gypsum board with white/gray core
b. **Odor:** None
c. **Odor threshold:** Not available
d. **pH:** ~7
e. **Melting point/freezing point:** Not Available
f. **Initial boiling point and boiling range:** Not Available
g. **Flash point:** Not available
h. **Evaporation rate:** Not available
i. **Flammability (solid, gas):** Not flammable
j. **Upper/lower flammability or explosive limits:** Not available
k. **Vapor pressure:** Not available
l. **Vapor density:** Not available
m. **Relative density:** 2.3 g/cc
n. **Solubility(ies):** 2.1 g/L @ 20° C
o. **Partition coefficient: n-octanol/water:** Not available
p. **Auto-ignition temperature:** Not available
q. **Decomposition temperature:** 1450°C
r. **Viscosity:** Not available
s. **Volatile organic compound (VOC) content:** None

SECTION 10: STABILITY AND REACTIVITY

a. **Reactivity:** No data available
b. **Chemical stability:** Stable in dry environments
c. **Possibility of hazardous reactions:** None known
d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known

e. **Incompatible materials:** None
f. **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO_2) and various oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)

SKIN CORROSION/IRRITATION

Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

There is no indication of skin sensitization in guinea pigs [OECD TG 406].

RESPIRATORY SENSITIZATION

Not available

SENSITIZATION

Not available

MUTAGENICITY

No evidence of mutagenicity on Ames Test.

CARCINOGENICITY

Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS

Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Not available

ASPIRATION TOXICITY

Not available

SECTION 12: ECOLOGICAL INFORMATION

a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
b. **Persistence and degradability:** Unknown
c. **Bioaccumulative potential:** Gypsum is a naurally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
d. **Mobility in soil:** Unknown
e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

Canada WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit

PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

National Gypsum.

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

Gold Bond®
Building Products

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
goldbondbuilding.com

Gold Bond® Conventional Plaster Products

SDS01307

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Gold Bond® Conventional Plaster Products

IDENTIFIERS

Gold Bond® Gypsolite® Plaster
Gold Bond® Super-White Gauging Plaster Quick Set
Gold Bond® Super-White Gauging Plaster Slow Set
Gold Bond® Super-White Moulding Plaster
Gold Bond® Kal-Kote® Basecoat Plaster
Gold Bond® Two-Way Hardwall Plaster
Plant Stucco
1-C Stucco

OTHER MEANS OF IDENTIFICATION

Construction Plaster

RECOMMENDED USE

Gauging Plaster	Gypsum plaster added to lime putty, provides and controls set.
Gypsolite Plaster	Basecoat gypsum and perlite mill-mixed plaster.
Kal-Kote Base	Base coat for veneer plaster system.
Moulding Plaster	Used in ornamental plaster work.
Two-Way Hardwall	Basecoat plaster used in conventional plaster systems, job mixed with sand or perlite aggregate.

Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: goldbondbuilding.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Specific target organ toxicity, repeated exposure – Category 2 (H-373)
Acute toxicity, inhalation - Category 4 (H-332)
Acute toxicity, dermal – Category 4 (H-312)

PICTOGRAM

SIGNAL WORD

None

HAZARD STATEMENTS

H-373	Causes damage to organs through prolonged or repeated exposure (lungs).
H-312, 332	Harmful in contact with skin or inhaled.

Gold Bond® Building Products

PRECAUTIONARY STATEMENTS
PREVENTION

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations. Do not wash material down drains.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)
Calcium Sulfate Hemihydrate	Plaster of Paris, Stucco	10034-76-1	>85
And may contain:			
Perlite		93763-70-3	<5
IMPURITIES: Crystalline silica	Quartz	14808-60-7	<1.5

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO_2) and oxides of carbon.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No special precautions required

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Vacuum spilled material utilizing a vacuum equipped with a HEPA filter. Avoid dry sweeping. Maintain proper ventilation to minimize dust. Avoid washing material down drains. This material will eventually set and can cause clogs.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Keep containers closed when not in use. Avoid contact with acids and water.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters **Exposure Limits**

COMPONENT	OSHA PEL mg/m³	ACGIH TLV mg/m³
Calcium Sulfate Hemihydrate	15(T) 5(R)	10(T)
Perlite	15(T) 5(R)	10(R)
IMPURITIES: Crystalline silica[1]	[(10) / (%SiO2+2)] (R) [(30) / (%SiO2+2)] (T)	0.025(R)
T - Total Dust R - Respirable Dust	*1 -Present as an impurity in raw materials*	

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance:** A white/gray powder
b. **Odor:** None
c. **Odor threshold:** Not available
d. **pH:** ~7
e. **Melting point/freezing point:** Not Available

f. **Initial boiling point and boiling range:** Not Available
g. **Flash point:** Not available
h. **Evaporation rate:** Not available
i. **Flammability (solid, gas):** Not flammable
j. **Upper/lower flammability or explosive limits:** Not available
k. **Vapor pressure:** Not available
l. **Vapor density:** Not available
m. **Relative density:** ~2.2-2.8
n. **Solubility(ies):** 2.1 g/L @20° C
o. **Partition coefficient: n-octanol/water:** Not available
p. **Auto-ignition temperature:** Not available
q. **Decomposition temperature:** 1450° C
r. **Viscosity:** Not available
s. **Volatile organic compound (VOC) content:** None

SECTION 10: STABILITY AND REACTIVITY

a. **Reactivity:** No data available
b. **Chemical stability:** Stable in dry environments
c. **Possibility of hazardous reactions:** None known
d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
e. **Incompatible materials:** Strong acids
f. **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO_2) and various oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Possible abdominal obstruction.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause burns, irritation, rash, itching or dermatitis. (See below)

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

This product becomes extremely hot when mixed with water. Do not use this material to produce a cast with intent to enclose any body part. Continued and prolonged contact may result in dry skin. Contact with dust may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Plaster of Paris: Oral LD50 (rat): >5000 mg/kg

SKIN CORROSION/IRRITATION

Not available

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

Not available

RESPIRATORY SENSITIZATION

Not available

SENSITIZATION

Not available

MUTAGENICITY

No evidence of mutagenicity on Ames Test.

CARCINOGENICITY

Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS

Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Not available

ASPIRATION TOXICITY

Not available

SECTION 12: ECOLOGICAL INFORMATION

a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
b. **Persistence and degradability:** Unknown
c. **Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
d. **Mobility in soil:** Unknown
e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

CANADA WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

Gold Bond Building Products, LLC

2001 Rexford Road

Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 28, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

National Gypsum.

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

Gold Bond® Building Products

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
goldbondbuilding.com

Gold Bond® Gypsum Board Products

SDS01501

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

Gold Bond® Gypsum Board Products

IDENTIFIERS

1/4" Gold Bond® Gypsum Board
3/8" Gold Bond® Gypsum Board
5/8" Gold Bond® Fire-Shield® Gypsum Board
1/4" Gold Bond® High Flex® Gypsum Board
5/16" Gold Bond® Durabase® Gypsum Board
3/8" Gold Bond® Durabase® Gypsum Board
1/2" Gold Bond® Durabase® Gypsum Board
5/8" Gold Bond® Durabase® Gypsum Board
1/2" Gold Bond® High Strength LITE® Gypsum Board
5/8" Gold Bond® EVOLVE 30™ Fire-Shield® Gypsum Board
5/8" Gold Bond® EVOLVE X™ Fire-Shield® Gypsum Board
5/8" Gold Bond® Foil Back Gypsum Board
3/4" Gold Bond® Ultra-Shield FS® Gypsum Board
1/2" Gold Bond® Foil Back Gypsum Board
Gypsum Board Reclaim
5/8" Gold Bond® RES-X™ Gypsum Board

OTHER MEANS OF IDENTIFICATION

Wallboard, Gypsum Board, Drywall

RECOMMENDED USE

Gypsum Board products are designed for specific applications that require properties such as: fire resistance, moisture resistance, abrasion resistance, sag resistance and other properties required for applications in walls and ceiling assemblies. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: goldbondbuilding.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Not classified

PICTOGRAM

None

SIGNAL WORD

None

HAZARD STATEMENTS

None

PRECAUTIONARY STATEMENTS

PREVENTION

Do not breathe dust. Use personal protective equipment as required. (See Section 8). Use engineering controls and wet methods to minimize dust.

Gold Bond® Building Products

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin, wash with plenty of soap and water.

If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	85-95	Crystalline silica (CAS# 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	5-15	
Acid Modified Corn Starch	Starch	65996-63-6	<3	
And may contain:			<5	
Hydrous phyliosilicate	Vermiculite	1318-00-9		Crystalline silica (CAS# 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass, synthetic, vitreous, continuous	65997-17-3	<4	Mixture-calcium, aluminum silicates, amorphous silica

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE

None known. Above 1450° C, material can decompose and release sulfur dioxide (SO_2) and oxides of carbon.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No special precautions required

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Store panels flat to minimize damage and warping. Do not stack panels too high when storing to minimize the risk of falling..

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters **Exposure Limits**

COMPONENT	OSHA PEL mg/m³	ACGIH TLV mg/m³
Calcium Sulfate Dihydrate	15(T) 5(R)	10(T)
Crystalline Silica1	[(10) / (%SiO2+2)](R) [(30) / (%SiO2+2)] (T)	0.025(R)
Vermiculite	15(T) 5(R)	10(T) 3(R)
Fiberglass, synthetic, vitreous, continuous	15(T) 5(R)	1 f/cc(R)

T - Total Dust R - Respirable Dust 1 - Present as an impurity in raw materials.

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance:** Paper-faced gypsum board with white/gray core
b. **Odor:** None
c. **Odor threshold:** Not available
d. **pH:** ~7
e. **Melting point/freezing point:** Not Available
f. **Initial boiling point and boiling range:** Not Available
g. **Flash point:** Not available
h. **Evaporation rate:** Not available
i. **Flammability (solid, gas):** Not flammable
j. **Upper/lower flammability or explosive limits:** Not available
k. **Vapor pressure:** Not available
l. **Vapor density:** Not available
m. **Relative density:** 2.3 g/cc
n. **Solubility(ies):** 2.1 g/L @ 20° C
o. **Partition coefficient: n-octanol/water:** Not available
p. **Auto-ignition temperature:** Not available
q. **Decomposition temperature:** 1450° C
r. **Viscosity:** Not available
s. **Volatile organic compound (VOC) content:** None

SECTION 10: STABILITY AND REACTIVITY

a. **Reactivity:** No data available
b. **Chemical stability:** Stable in dry environments
c. **Possibility of hazardous reactions:** None known
d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
e. **Incompatible materials:** NONE
f. **Hazardous decomposition products:** None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO_2) and various oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.

Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley).

SKIN CORROSION/IRRITATION

Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404].

SERIOUS EYE DAMAGE/EYE IRRITATION

Not available

SKIN SENSITIZATION

There is no indication of skin sensitization in guinea pigs [OECD TG 406].

RESPIRATORY SENSITIZATION
Not available

SENSITIZATION
Not available

MUTAGENICITY
No evidence of mutagenicity on Ames Test.

CARCINOGENICITY
Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE Not available

ASPIRATION TOXICITY Not available

SECTION 12: ECOLOGICAL INFORMATION

a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
b. **Persistence and degradability:** Unknown
c. **Bioaccumulative potential:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
d. **Mobility in soil:** Unknown
e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

STATE REGULATIONS: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

CANADA WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).
Crystalline silica: WHMIS Classification D2A.

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

Gold Bond Building Products, LLC

2001 Rexford Road

Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:
January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:
As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

National Gypsum

National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC.

Gold Bond Building Products

Gold Bond Building Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
goldbondbuilding.com

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION:

Product name: SILICONE SEALANT- COLORS
Product Code(s): KK0201 (aluminum), KK0202, KK0202-B & KK0309 (black), KK0207
Recommended use: (white) Silicone Sealant and Adhesive
Restrictions on use: No further information available

Manufacturer:
Imperial Manufacturing Group Inc.
40 Industrial Park Street
Richibucto, NB, Canada
E4W 4A4
Tel: (905)-829-5888
www.imperialgroup.ca

Emergency telephone: (24 hours) Canutec (613) 996-6666 (Collect)

SECTION 2 – HAZARDS INDENTIFICATION:

GHS Classification:
Eye irritation – Category 2B
Skin irritation – Category 2
Skin sensitization – Category 1B
Carcinogenicity – Category 2

GHS Label elements:

Hazard symbols:

Signal word: Warning

Hazard statements:
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes eye irritation
H351 Suspected of causing cancer

Precautionary statements:

Prevention:
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust, fume or vapors.
P262 Do not get in eyes, on skin or on clothing.
P264 Wash hands and other skin areas thoroughly after handling
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response :
P302+P352+P333+P313 If on skin, wash with plenty of soap and water.If skin irritation or rash occurs, get medical attention.
P305+P351+P338 If in eyes, rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P313 If exposed or concerned: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash it before reuse.

Storage:
P405+P403 Store locked up. Store in a well-ventilated place.

Disposal:
P501 Dispose of contents and container in accordance with applicable local, regional, national and international regulations.

Other hazards: None known

Supplemental information: 95% of the mixture consists of component(s) of unknown acute inhalation toxicity.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS:

Substance/Mixture: Mixture

Chemical Name	CAS No.	Concentration (%)
Silicone Dioxide	7631-86-9	5.0 – 10.0
Distillates (Petroleum), Hydrotreated Middle	64742-46-7	5.0 – 10.0
Pigmented sealants may contain:		
Carbon Black	1333-86-4	0.1 – 1.0
Titanium Dioxide	13463-67-7	0.1 – 1.0
Pigment Blue 15	147-14-8	1.0 – 5.0
Iron Oxide	1309-37-1	1.0 – 5.0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

SECTION 4 - FIRST AID MEASURES:

Eye contact: Flush with copious quantities of lukewarm water for at least 15 minutes. Do not attempt to physically remove the solids or gums from the eye. Seek medical attention immediately if irritation persists.

Skin contact: Remove contaminated clothing. Wash thoroughly with warm water and non-abrasive soap. Seek medical attention if you feel ill or a reaction develops.

Inhalation: Remove to fresh air and provide water. Seek medical attention if you feel ill or a reaction develops.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed: None known.

Indication of immediate medical attention and special treament needed: Provide general supportive measures and treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES:

Suitable extinguishing media: Carbon dioxide, dry chemical, water fog or foam. Water can be used to cool fire exposed containers.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: Exposure to combustion products such as carbon oxides, silicone oxides and formaldehyde may be hazard to health.

Special protective equipment and precautions for fire fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.

SECTION 6 – ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures: Follow safe handling advice and personal protective equipment recommenation in Section 8.

Environment precautions: Discharged into the environment must be avoided. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Restrict access to the area of the spill. Provide ventilation, NIOSH/MHSA approved respirator and protective clothing. Scrape up sealant and place in

container for disposal. Clean area as appropriate since silicone materials can represent a slip hazard. Cleaning may require steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup.

SECTION 7 – HANDLING AND STORAGE:

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage, including any incompatibilities: Store in an adequately ventilated area under dry conditions between 50°F (10°C) to 77°F (25°C) and keep container tightly sealed when not in use. Do not store with strong oxidizing agents.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION:

Control Parameters:

Ingredient	CAS No.	Value Type (form of exposure)	Control parameters/ Permissible concentration	Basis
Silicone Dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m^3/%SiO2 (Silica)	OSHA Z-3
		TWA	6 mg/m^3 (Silica)	NIOSH REL
Distillates (Petroleum), Hydrotreated Middle	64742-46-7	TWA (Mist)	5 mg/m^3	OSHA Z-1
		TWA (Mist)	5 mg/m^3	OSHA P0
		TWA (Mist)	5 mg/m^3	NIOSH REL
		ST (Mist)	10 mg/m^3	NIOSH REL
Carbon Black	1333-86-4	TWA	3.5 mg/m^3	NIOSH REL
		TWA	3.5 mg/m^3	OSHA Z-1
		TWA (Inhalable fraction)	3 mg/m^3	ACGIH
Titanium Dioxide	13463-67-7	TWA	15 mg/m^3	OSHA PEL
		TWA	10 mg/m^3	ACGIH TLV
Iron Oxide	1309-37-1	TWA	10 mg/m^3	OSHA PEL
		TWA (Respirable fraction)	5 mg/m^3	ACGIH TLV
Pigment Blue 15	147-14-8	TWA	1 mg/m^3	OSHA PEL
		TWA	1 mg/m^3	ACGIH TLV

Engineering controls: Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Use respiratory protection unless local exhaust ventilation is provided or exposures are within guidelines.

Personal protective equipment: Safety glasses with side-protection, impermeable gloves (e.g., neoprene, nitrile, silver shield (R)), coveralls or apron are important in preventing contamination of eyes, skin and clothing. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Paste, thixotropic sealant
Odor:	Acetic acid
Odor threshold:	Not available
pH (ASTM D1293):	3.2
Melting point/Freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	>212°F (100°C) Closed Cup Method
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not classified as a flammability hazard
Upper flammability or explosion limit:	Not available
Lower flammability or explosion limit:	Not available
Vapor pressure:	Not applicable
Vapor density:	Not available
Specific gravity:	1.01
Solubility:	Not available
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not applicable
Acid Reserve, g NaOH/100 g (CCCR 2001, Sections 43 and 44):	0.17
Volatile Organic Content:	30 grams per liter, <3% by weight (Chemically Curing Sealants and Caulks – CARB Method 310: VOC less water, less exempt compounds and LVP-VOCs).

SECTION 10 – STABILITY AND REACTIVITY:

Reactivity:	Not classified as a reactivity hazard.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Use at elevated temperatures may form highly hazardous compounds. At above 150°C (300°F) in the presence of air, trace quantities of formaldehyde may be released. Acetic acid is formed upon contact with water or humid air.
Conditions to avoid:	Moisture and incompatible materials.
Incompatible materials:	Strong oxidizing agents or electrophiles (e.g. ferric chloride). Concentrated acids or bases can degrade the silicone polymer.
Hazardous decomposition products:	Carbon oxides, silicone dioxide, metal oxides, formaldehyde and traces of incompletely burned carbon products.

SECTION 11 - TOXICOLOGICAL INFORMATION:

Information on the likely routes of exposure:

Inhalation:	Prolonged inhalation may be harmful.
Ingestion:	May be harmful if swallowed.
Skin contact:	May cause an allergic skin reaction.
Eye contact:	May cause eye irritation on direct contact.

Symptoms related to the physical, chemical and toxicological characteristics:

May cause an allergic skin reaction. Suspected of causing cancer. Although the carbon black (CAS# 1333-86-4) is encapsulated by the silicone sealant, prolonged overexposure to carbon black dust causes lung fibrosis. Although the titanium dioxide (CAS# 13463-67-7) is encapsulated by the silicone sealant, prolonged overexposure to titanium dioxide dust causes tightness pain in the chest, coughing and difficulty breathing.

Acute toxicity:

Silicone Dioxide (CAS# 7631-86-9):
LD50 (Oral-Rat): >3300 mg/kg
LC50 (Inhalation-Rat): >2.08 mg/L (4 hrs.)
LD50 (Dermal-Rabbit): >5000 mg/kg

Distillates(Petroleum), Hydrotreated Middle (CAS# 64742-46-7):
LD50 (Oral-Rat): >5000mg/kg
LC50 (Inhalation-Rat): 1.78 mg/L (4 hrs.)
LD50 (Dermal-Rat): >2000 mg/kg.

Carbon Black (CAS# 1333-86-4):
LD50 (Oral-Rat): 14,400mg/kg.

Titanium Dioxide (CAS# 13463-67-7):
LD50 (Oral-Rat): 24,000 mg/kg

Pigment Blue 15 (CAS# 147-14-8):
LD50 (Oral-Rat): >10,000mg/kg.

Skin corrosion/irritation: May cause skin irritation.
Serious eye damage/irritation: May cause eye irritation.
Aspiration hazard: Not classified based on available information.
Distillates (petroleum), hydrotreated middle (CAS# 64742-46-7) is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Specific target organ toxicity - single exposure: Not classified based on available information.
Specific target organ toxicity – repeated exposure: Not classified based on available information.
Respiratory or skin sensitization: Not classified based on available information.

Carcinogenicity: No ingredients considered by IARC, NTP or OSHA to be carcinogens except in the pigmented sealants which may contain:
Carbon Black (CAS# 1333-86-4):
IARC Group 2B – possibly carcinogenic to humans.
Titanium Dioxide (CAS# 13463-67-7):
IARC Group 2B – possibly carcinogenic to humans.

Reproductive toxicity: Not classified based on available information.
Teratogenicity: Not classified based on available information.
Germ cell mutagenicity: Not classified based on available information.

SECTION 12 – ECOLOGICAL INFORMATION:

Ecotoxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulated potential: No data available.
Mobility in soil: No data available.
Other adverse effects: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS:

Disposal instructions: This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local, regional,national and international regulations.
Waste from residues: Dispose of in accordance with local regulations.
Contaminated packaging: Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14 - TRANSPORT INFORMATION:

Shipping Information: Not subject to DOT, TDG, IMDG Code or IATA Regulations.

SECTION 15 - REGULATORY INFORMATION:

EPCRA – Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity:

Ingredients	CAS No.	Component RQ (lbs)	Calculated product RQ (lbs)
Acetic acid	64-19-7	5000	*
Acetic anhydride	108-24-7	5000	*

* Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity:
This product does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards: No SARA hazards.
SARA 302: No chemicals in this product are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313: This product does not contain any chemical components with known CAS No. that exceed the threshold reporting levels established by SARA Title III, Section 313.

Pennsylvania Right To Know:

Dimethyl siloxane, hydroxy-terminated	70131-67-8	70 – 90%
Silicone dioxide	7631-86-9	5 – 10%
Distillates (petroleum), hydrotreated middle	64742-46-7	5 – 10%
Acetic acid	64-19-7	0 – 0.1%
Acetic anhydride	108-24-7	0 – 0.1%
Carbon black	1333-86-4	0.1 – 1%
Titanium dioxide	13463-67-7	0.1 – 1%
Pigment blue 15	147-14-8	1 – 5%
Iron oxide	1309-37-1	1 – 5%

New Jersey Right To Know:

Dimethyl siloxane, hydroxy-terminated	70131-67-8	70 – 90%
Silicone dioxide	7631-86-9	5 – 10%
Distillates (petroleum), hydrotreated middle	64742-46-7	5 – 10%
Carbon black	1333-86-4	0.1 – 1%
Titanium dioxide	13463-67-7	0.1 – 1%
Pigment blue 15	147-14-8	1 – 5%
Iron oxide	1309-37-1	1 – 5%

California Proposition 65: This product contains trace amount of substances, in the form of airborne or unbound particles, known to the State of California to cause cancer or other reproductive harm:
Carbon Black (CAS# 1333-86-4) and Titanium Dioxide (CAS# 13463-67-7)

The ingredients of this product are reported in the following inventories:

TSCA: All chemical substances in this product are included on or exempted from listing on the TSCA inventory of Chemical Substances.

DSL: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempted from listing on the Canadian Domestic Substances List (DSL).

NFPA Profile: Health 1, Flammability 1, Reactivity 0

SECTION 16 - OTHER INFORMATION:

Prepared by: Imperial Manufacturing Group Inc.
Revision date: March 2, 2020

Notice to the Reader: The information is provided in good faith and is correct to the best of Imperial Manufacturing Group Inc.'s knowledge as of the date hereof and is designed to assist our customers; however Imperial Manufacturing Group Inc. makes no representation as to its completeness or accuracy. Final determination of suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Imperial Manufacturing Group Inc. disclaims all expressed or implied warranties or representations.

Safety Data Sheet (SDS)
Johnson Abrasives

MSDS Number: 152D

Smooth-Kut ™

Revision Date: 2/16/2015

1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Johnson Abrasives
49 FItzgerald Drive
Jaffrey, NH 03452

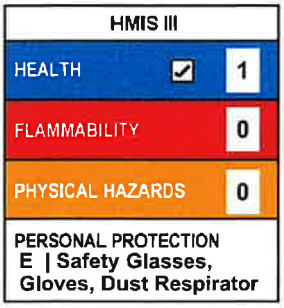
Contact:	Johnson Abrasives
Phone:	+1-603-532-4434
Fax:	+1-603-532-4436
Web:	www.johnsonabrasives.com

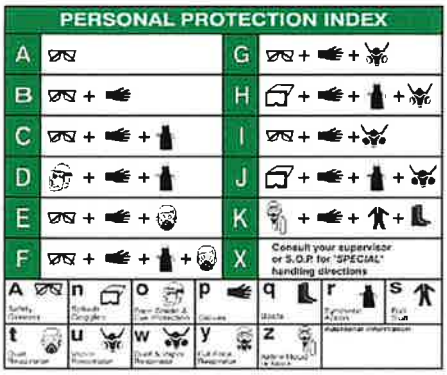
Product Name:	Smooth-Kut ™
Revision Date:	2/16/2015
Version:	1
MSDS Number:	152D
CAS Number:	MIXTURE
Product Use:	Abrasive Product
Emergency Phone:	+1-800-642-4265 or +1-603-532-4434

2 HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 1, Fire = 0, Reactivity = 0
H*1/F0/PH0





GHS Signal Word:
WARNING

GHS Classifications:
Health, Serious Eye Damage/Eye Irritation, 2 B

GHS Phrases:
H320 - Causes eye irritation

GHS Precautionary Statements:
P261 - Avoid breathing dust produced while using this product.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P285 - In case of inadequate ventilation wear respiratory protection.
P304+341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Do NOT rub. Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+313 - If eye irritation persists: Get medical advice/attention.
P342 - If experiencing respiratory symptoms: Get medical advice/attention.
P402 - Store in a dry place.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Percentage	Chemical Name
409-21-2	0-50%	Silicon carbide
9003-35-4	5-30%	Cured Resin, Phenol-Formaldehyde polymer
9011-05-6	10-30%	Cured Resin, Urea-Formaldehyde polymer
1317-65-3	0-25%	Limestone
1332-58-7	0-15%	Kaolin Clay
N/A	0-30%	Cotton or Polyester Cloth, Mesh or Paper Backing

4 FIRST AID MEASURES

Inhalation: Blow nose to remove substance from nasal passages. Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: No need for first aid is anticipated for non-abrasive exposure to product. If reddening develops and/or persists, obtain medical attention.

Eye Contact: Do NOT rub eyes. Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. If irritation persists, obtain medical attention.

Ingestion: No need for first aid is anticipated. If symptoms develop, obtain medical attention.

Most important symptoms and effects, both acute and delayed:
The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed:
No data available.

5 FIRE FIGHTING MEASURES

Flammability: Not classified
Flash Point: DNA
Flash Point Method: DNA
Burning Rate: No data available
Autoignition Temp: No data available
LEL: DNA
UEL: DNA

Product is flammable when exposed to direct flame. During proper, recommended use of this product, no flammability hazard exists.

Extinguishing Media:
Water Spray
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:
Aluminum Oxides
Calcium Oxides
Carbon Oxides
Nitrogen Oxides (NOx)
Silicon Oxides

Advice for Firefighters:
Firefighters should wear full-face, positive-pressure respirators.

Further Information:
If incinerated, may release toxic fumes.
See Section 7 for more information on safe handling.
See Section 8 for more information on personal protection equipment.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Use personal protective equipment, including dust respirator.
Avoid breathing dust.
Ensure adequate ventilation.

Environmental precautions:
No special environmental precautions required.

Methods and materials for containments and cleaning up:
Pick up and arrange disposal without creating dust.
Sweep up, shovel or collect spillage and place material into suitable container for disposal.
Inspect product for torn or damaged areas. Do not use if product is torn or damaged.
Dispose of contaminated material according to Section 13.
Ensure adequate ventilation.

Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on proper disposal.

7 HANDLING AND STORAGE

Handling Precautions:

Ensure adequate ventilation.
Avoid breathing of dust created while sanding, grinding or machining - use dust respirator while using product.
Avoid contact with skin, eyes and clothing.
Damaged product can break apart during use and cause serious bodily injury, specifically to the eyes - use safety glasses while using product.
Check product for damages such as tears or cracks prior to use. Do not use damaged product.
Comply with RPM rating specified on this product.
Comply with ANSI B7.1-2010 Safety Requirements for the Use, Care and Protection of Abrasive Wheels (if applicable).
Combustible dust may be formed as a result of using this product. Take care to not let generated dust accumulate.
Accumulated dust may present an explosive hazard when dispersed in sufficient concentration while near an ignition source.
Collect dust and dispose of regularly.

Storage Requirements:

Keep away from heat, sparks and flames.
Store in a dry place - keep away from moisture.
Store at temperatures between 40-90 °F at 30-80% relative humidity.
Store away from strong acids, strong oxidizing agents, pure Aluminum and Magnesium.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection:
When using material use safety glasses, gloves, and dust respirator according to HMIS PP, E.
All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:
Handling material with gloves is not required, but strongly recommended in order to prevent accidental secondary contact with eyes. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact.
Dispose of contaminated gloves according to applicable laws and practices.

Body Protection:
Safety glasses, gloves and dust respirator are recommended. Type of protective equipment should be selected based on ventilation conditions and other conditions of use of this material.

Respiratory protection:
Use a NIOSH/MSHA dust mask according to 24 CFR 1910.134. Full-face dust respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:
No special requirements are necessary.

Components with workplace control parameters:

Component(s): SIlicon Carbide, Corundum; Limestone; Kaolin Clay
CAS No(s): 409-21-2; 1317-65-3; 1332-58-7
USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminant (TWA): 15.0 mg/m^3 (as total dust)
USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminant (TWA): 5.0 mg/m^3 (as respirable fraction)
USA OSHA Table Z-1 Limits for Air Contaminants - 1910-1000 (TWA): 10.0 mg/m^3 (as total dust)
USA OSHA Table Z-1 Limits for Air Contaminants - 1910-1000 (TWA): 5.0 mg/m^3 (as respirable fraction)
USA ACGIH (TWA/TLV): 1.0 fiber/cm^3
USA ACGIH (TWA/TLV): 3.0 mg/m^3
USA NIOSH (TWA): 10.0 mg/m^3 (as total dust)
USA NIOSH (TWA): 5.0 mg/m^3 (as respirable fraction)

Biological occupational exposure limits:

Contains no substances with biological occupational exposure limits values.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Cloth, paper or screen coated with abrasive material		
Physical State:	Solid	**Odor:**	Faint
Odor Threshold:	DNA	**Molecular Formula:**	MIXTURE
Particle Size:	DNA	**Solubility:**	DNA
Spec Grav./Density:	DNA	**Softening Point:**	DNA
Viscosity:	DNA	**Percent Volatile:**	DNA
Sat. Vap. Conc.:	DNA	**Heat Value:**	DNA
Boiling Point:	DNA	**Freezing/Melting Pt.:**	DNA
Flammability:	(solid, gas): Not classified	**Flash Point:**	DNA
Partition Coefficient:	DNA	**Octanol:**	DNA
Vapor Pressure:	DNA	**Vapor Density:**	DNA
pH:	DNA	**VOC:**	DNA
Evap. Rate:	DNA	**Bulk Density:**	DNA
Molecular weight:	DNA	**Auto-Ignition Temp:**	DNA
Decomp Temp:	DNA	**UFL/LFL:**	DNA

10 STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Incompatibilities, flames, ignition sources and moisture.
Materials to Avoid:	Strong acids, strong oxidizing agents, pure Aluminum and Magnesium.
Hazardous Decomposition:	Aluminum Oxides, Calcium Oxides, Carbon Oxides, Nitrogen Oxides (NOx) and Silicon Oxides.
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Component(s): Silicon Carbide; Cured Resin, Phenol-Formaldehyde polymer; Cured Resin, Urea-Formaldehyde polymer; Limestone; Kaolin Clay
CAS No(s): 409-21-2; 9003-35-4; 9011-05-6; 1317-65-3; 1332-58-7

Acute Toxicity:
LD50 Oral - Rat: > 2,000 mg/kg
LD50 Dermal - Rabbit: > 20,800 mg/kg
LDLo Intraperitoneal - Rat: 300 mg/kg
LCLo Inhalation - Rat: 60 mg/m^3 (6 h)

Skin Corrosion/Irritation: The product itself does no present hazards when used correctly. Mechanical irritation (abrasion) may cause skin irritation.

Serious Eye Damage/Eye Irritation: The product itself does no present hazards. Dust created by grinding, sanding or machining may cause eye irritation.

Respiratory or Skin Sensitation: Skin allergy was observed in humans and guinea pigs following repeated exposure to this material. Certain sensitive individuals may experience allergy symptoms following prolonged, repeated skin contact with this material.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: This product is or contains a component that is classifiable as to its carcinogenicity by the IARC, ACGIH, NTP or OSHA (Kaolin Clay).

IARC: 1 - Group 1: Carcinogenic to humans (Kaolin Clay).
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: Known to be a human carcinogen (Kaolin Clay).
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure: Respiratory system: The product itself does no present hazards. Dust created by grinding, sanding or machining may cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure: Respiratory system: Data that exists is not sufficient for classification. Prolonged occupational exposure may be related to pneumoconiosis and/or pulmonary fibrosis.

Aspiration Hazard: No data available.

Additional Information:
Component: Silicon Carbide; RTECS: VW0450000
Component: Cured Resin, Phenol-Formaldehyde polymer; RTECS: SM8542500
Component: Cured Resin, Urea-Formaldehyde polymer; RTECS: YU1610000
Component: Limestone; RTECS: FF9335000
Component: Kaolin Clay; RTECS: GF1670500

12 ECOLOGICAL INFORMATION

Component(s): Silicon Carbide; Cured Resin, Phenol-Formaldehyde polymer; Cured Resin, Urea-Formaldehyde polymer; Limestone; Kaolin Clay
CAS No(s): 409-21-2; 9003-35-4; 9011-05-6; 1317-65-3; 1332-58-7

Toxicity:

Toxicity to fish:
No data available.

Toxicity to daphnia and other aquatic invertebrates:
No data available.

Persistence and Degradability:
No data available.

Bioaccumulative potential:
No data available.

Mobility in Soil:
No data available.

Results of PBT and vPvB assessment:
Not required/conducted.

Other Adverse Effects:
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13 DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material. Consult all applicable authorities and regulations to ensure proper classification. Any abraded material remaining on used product (from the substrate being abraded) may need to be considered as a factor in the disposal classification, method or handling of used product.

Contaminated Packaging: Dispose of as unused product.

14 TRANSPORT INFORMATION

DOT (US)
Non-regulated material

IMDG
Non-regulated material

IATA
Non-regulated material

IMO

Non-regulated material

15 REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

*Silicon carbide (409212 0-50%) MASS, NJHS, OSHAWAC, PA, SARA311/312, TSCA, TXAIR

*Cured Resin, Phenol-Formaldehyde polymer (9003354 5-30%) TSCA

*Cured Resin, Urea-Formaldehyde polymer (9011056 5-30%) TSCA

*Limestone (1317653 0-25%) MASS, NJHS, OSHAWAC, PA, TSCA, TXAIR

*Kaolin Clay (1332587 0-15%) MASS, NJHS, OSHAWAC, PA, PROP65, SARA311/312, TSCA, TXAIR

REGULATORY KEY DESCRIPTIONS

MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
PROP65 = CA Prop 65
SARA311/312 = SARA 311/312 Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Johnson Abrasives believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Johnson Abrasives' control, Johnson Abrasives makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

Preparation Information:

GHS Conversion Services
www.ghsconversionservices.com
(414) 336-2546
(669) 236-0304

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Acetone
CAS number	67-64-1
Synonyms	Dimethyl ketone; 2-propanone

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable Liquids (Category 2)
Serious Eye Damage/Eye Irritation (Category 2)
Specific Target Organ Toxicity - single exposure (Category 3)
Target Organs- Central nervous system (CNS)
Specific Target Organ Toxicity - repeated exposure (Category 2)
Target Organs- Kidney, Liver, Spleen, Blood

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Danger

Hazard statements:
Highly flammable liquid and vapor
Causes serious eye irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure

Precautionary statements:
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool
Get medical attention/advice if you feel unwell
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
In case of fire: Use CO_2, dry chemical, or foam for extinction
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Dispose of contents/container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Acetone	Dimethyl ketone; 2-propanone	67-64-1	> 99.5%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Rinse mouth. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause pulmonary edema.

4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.
Unsuitable extinguishing media	Water may be ineffective.

5.2 Specific hazards arising from the substance or mixture

Flammable. Risk of ignition. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point -20 °C / -4 °F (closed cup)

Autoignition Temperature 465 °C / 869°F

Explosion limits

Upper 2.5% (V)

Lower 12.8% (V)

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2 Environmental precautions

Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Flammables area. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

Incompatibilities
Strong oxidizing agents. Strong reducing agents. Strong bases. Peroxides. Halogenated compounds. Alkali metals. Amines.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Acetone	TWA	1000 ppm 2400 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Acetone	TWA	250 ppm
	STEL	500 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Acetone	IDLH	2500 ppm
	TWA	250 ppm 590 mg/m3

Biological occupational exposure limits
No information available.

8.2 Exposure controls

Appropriate engineering controls
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment.

Personal protective equipment

Eye/face protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection
Wear appropriate protective gloves.

Body Protection
Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure
Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Sweet. Alcohol-like
Odor Threshold	No information available.
pH	No information available.
Melting Point/Range	-94°C / -137 °F
Boiling Point/Range	56 °C / 133 °F
Evaporation Rate	No information available.
Flammability (solid)	Not applicable.
Flammability or explosive limit	
Upper	2.5% (V)
Lower	12.8% (V)
Vapor Pressure	245.3 hPa (184.0 mmHg) at 20.0 °C / 68.0 °F
Vapor Density	No information available.
Density	0.791 g/cm3 at 25 °C / 77 °F
Solubility	Completely soluble
Partition coefficient; n-octanol/water	No information available.
Autoignition Temp	465 °C / 869°F
Decomposition Temp	Not pertinent
Viscosity	No information available.
Molecular Formula	C3H6O
Molecular Weight	58.08 g/mol
VOC Content(%)	No information available.
Oxidizing properties	No information available.

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Vapors may form explosive mixture in air.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
None under normal processing.

10.4 Conditions to avoid
Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials
Strong oxidizing agents, Strong reducing agents, Strong bases, Peroxides, Halogenated compounds, Alkali metals, Amines.

10.6 Hazardous decomposition products
Carbon monoxide (CO), Carbon dioxide (CO2), Formaldehyde, Methanol.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetone	5800 mg/kg (rat)	7426 mg/kg (guinea pig)	50100 mg/m3 (rat)

Skin corrosion/irritation
No information available.

Serious eye damage/eye irritation
Irritating to eyes.

Respiratory or skin sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Acetone	67-64-1	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Central nervous system (CNS)

Specific target organ toxicity - repeated exposure

Kidney, Liver, Spleen, Blood

Reproductive toxicity

No information available.

Chronic effects

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: May cause pulmonary edema.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results	
Acetone	NOEC	Algae	430 mg/L	96 h
	LC50	Oncorhynchus mykiss	5540 mg/L	96 h
	LC50	Alburnus albumus	11000 mg/L	96 h
	LC50	Leuciscus idus	11300 mg/L	48 h
	LC50	Salmo gairdneri	6100 mg/L	24 h
	EC50	Microtox	14500 mg/L	15 min
	EC50	Water flea	8800 mg/L	48 h
	EC50	Water flea	12700 mg/L	48 h
	EC50	Water flea	12600 mg/L	48 h

12.2 Persistence and degradability

Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its volatility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN1090
Proper Shipping Name	Acetone
Hazard Class	3
Packing Group	II

IMDG

UN-no	UN1090
Proper Shipping Name	Acetone
Hazard Class	3
Packing Group	II

IATA

UN-no	UN1090
Proper Shipping Name	Acetone
Hazard Class	3
Packing Group	II

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, RQ: 5000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed.

US. New Jersey Worker and Community Right-to-Know Act

Listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 06/18/2018
Revision 1: 06/15/2023
Revision 2: 10/03/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

1 Identification

· **Product Identifier**

· **Trade Name: Plaster-Weld©**
· **Relevant identified uses of the substance or mixture and uses advised against:**
· **Product Description:** Surface applied bonding agent for interior only surfaces.

· **Details of the Supplier of the Safety Data Sheet:**
· **Manufacturer/Supplier:**
Larsen Products Corp.
8264 Preston Court
Jessup, MD 20794
P: 301-776-4595
F: 301-776-2723
jlasen@larsenproducts.com
www.larsenproducts.com
· **Emergency telephone number:** 800-633-6668

2 Hazard(s) Identification

· **Classification of the substance or mixture:**
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.

· **Label elements:**
· **Hazard pictograms:** Non-Regulated Material
· **Signal word:** Non-Regulated Material
· **Hazard statements:** Non-Regulated Material
· **Unknown acute toxicity:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.
· **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
· **NFPA ratings (scale 0 - 4)**

Health = 0
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0
Fire = 1
Physical Hazard = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of substances listed below with non-hazardous additions.
· **Dangerous Components:**

Trade Secret ◈ STOT RE 2, H373; ◈ Acute Tox. 4, H302 ≤2.5%

· **Additional information:**
The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

(Contd. on page 2)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Plaster-Weld©

4 First-Aid Measures

· ***Description of first aid measures***
· ***General information:*** No special measures required.
· ***After inhalation:***
Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in the side position for transportation.
· ***After skin contact:*** If skin irritation occurs, consult a doctor.
· ***After eye contact:***
Rinse opened eye for several minutes under running water.
If eye irritation occurs, consult a doctor.
· ***After swallowing:*** If swallowed and symptoms occur, consult a doctor.
· ***Information for doctor***
· ***Most important symptoms and effects, both acute and delayed:*** No further relevant information available.
· ***Indication of any immediate medical attention and special treatment needed:***
No further relevant information available.

5 Fire-Fighting Measures

· ***Extinguishing media***
· ***Suitable extinguishing agents:*** Use fire fighting measures that suit the environment.
· ***For safety reasons unsuitable extinguishing agents:*** No further relevant information.
· ***Special hazards arising from the substance or mixture:*** No further relevant information available.
· ***Advice for firefighters***
· ***Special protective equipment for firefighters:***
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

· ***Personal precautions, protective equipment and emergency procedures:*** Not required.
· ***Environmental precautions:*** Do not allow to enter sewers/surface or ground water.
· ***Methods and material for containment and cleaning up:***
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
· ***Reference to other sections:***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· ***Protective Action Criteria for Chemicals***
· ***PAC-1:***

9002-89-5	Poly(vinyl alcohol)	24 mg/m³
	Trade Secret	30 ppm
	Trade Secret	2.3 ppm
532-32-1	Sodium Benzoate	61 mg/m³
556-67-2	Octamethylcyclotetrasiloxane	30 ppm

· ***PAC-2:***

9002-89-5	Poly(vinyl alcohol)	270 mg/m³
	Trade Secret	150 ppm

(Contd. on page 3)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Plaster-Weld©

	Trade Secret	25 ppm
532-32-1	Sodium Benzoate	680 mg/m³
556-67-2	Octamethylcyclotetrasiloxane	68 ppm

· ***PAC-3:***

9002-89-5	Poly(vinyl alcohol)	1,600 mg/m³
	Trade Secret	900 ppm
	Trade Secret	150 ppm
532-32-1	Sodium Benzoate	810 mg/m³
556-67-2	Octamethylcyclotetrasiloxane	130 ppm

7 Handling and Storage

· ***Handling***
· ***Precautions for safe handling:***
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· ***Information about protection against explosions and fires:*** No special measures required.

· ***Conditions for safe storage, including any incompatibilities***
· ***Storage***
· ***Requirements to be met by storerooms and receptacles:*** No special requirements.
· ***Information about storage in one common storage facility:*** Not required.
· ***Further information about storage conditions:*** Keep receptacle tightly sealed.
· ***Specific end use(s):*** No further relevant information available.

8 Exposure Controls/Personal Protection

· ***Additional information about design of technical systems:*** No further data; see section 7.

· ***Control parameters:***

· ***Components with occupational exposure limits:***

Trade Secret

TLV Short-term value: 10** mg/m³, 50* ppm
Long-term value: 25* ppm
*vapor fraction:**inh. fraction, aerosol only

WEEL I (2)

· ***Additional information:*** The lists that were valid during the creation of this SDS were used as basis.

· ***Exposure controls:***
· ***Personal protective equipment***
· ***General protective and hygienic measures:***
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
· ***Breathing equipment:*** Not required.
· ***Protection of hands:*** Not required.
· ***Material of gloves:*** Not applicable.
· ***Penetration time of glove material:*** Not applicable.

(Contd. on page 4)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Plaster-Weld©

· **Eye protection:**

Goggles recommended during refilling.

· **Limitation and supervision of exposure into the environment:** None

*

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Liquid
Color:	Pink
· **Odor:**	Mild
· **Odor threshold:**	Not determined.
· **pH-value @ 20 °C (68 °F):**	4-5
· **Change in condition**	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	182.2-340 °C (360-644 °F)
· **Flash point:**	>113 °C (>235.4 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	Not applicable
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not self-igniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure @ 20 °C (68 °F):**	≤23 hPa (≤17.3 mm Hg)
· **Density @ 20 °C (68 °F):**	1.1092 g/cm³ (9.2563 lbs/gal)
· **Relative density:**	Not determined.
· **Vapor density:**	Not determined.
· **Evaporation rate:**	Not determined.
· **Solubility in / Miscibility with:**	
Water:	Miscible
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
VOC content:	.85 % 24.6 g/l / 0.21 lb/gal
· **Other information:**	No further relevant information available.

(Contd. on page 5)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Plaster-Weld©

10 Stability and Reactivity

· **Reactivity:** No further relevant information available.
· **Chemical stability:**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions:** No dangerous reactions known.
· **Conditions to avoid:** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

· **Information on toxicological effects:**
· **Acute toxicity:**
· **LD/LC50 values that are relevant for classification:**

Trade Secret

Oral	LD50	5,840 mg/kg (Rat)
Dermal	LD50	9,530 mg/kg (Rabbit)
Inhalative	LC50/96 hours	38.109 mg/l (Trout)
	LC50/48 hrs	16.103 mg/l (Daphnia)

· **Primary irritant effect:**
· **On the skin:** No irritating effect.
· **On the eye:** No irritating effect.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

· **Carcinogenic categories:**
· **IARC (International Agency for Research on Cancer):**
Group 1 - Carcinogenic to humans
Group 2A - Probably carcinogenic to humans
Group 2B - Possibly carcinogenic to humans
Group 3 - Not classifiable as to its carcinogenicity to humans
Group 4 - Probably not carcinogenic to humans
9002-89-5 Poly(vinyl alcohol) 3

· **NTP (National Toxicology Program):**
None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**
None of the ingredients are listed.

12 Ecological Information

· **Toxicity:**
· **Aquatic toxicity:**

Trade Secret

EC50 3.536 mg/l (Green algae)

· **Persistence and degradability:** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential:** No further relevant information available.
· **Mobility in soil:** No further relevant information available.

(Contd. on page 6)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Plaster-Weld©

· **Additional ecological information:**
· **General notes:**
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment:**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Observe all federal, state and local environmental regulations when disposing of this material.

· **Uncleaned packaging**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

· **UN-Number:**
· **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
· **UN proper shipping name:**
· **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
· **Transport hazard class(es):**

· **DOT, ADR/ADN, ADN, IMDG, IATA**
· **Class:** Non-Regulated Material
· **Packing group:**
· **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
· **Environmental hazards:** Not applicable.
· **Special precautions for user:** Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
· **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
· **SARA (Superfund Amendments and Reauthorization):**
· **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**
Trade Secret

· **TSCA (Toxic Substances Control Act):**

7732-18-5	Water, distilled water, deionized water	ACTIVE
9002-89-5	Poly(vinyl alcohol)	ACTIVE
	Trade Secret	ACTIVE
	Trade Secret	ACTIVE
532-32-1	Sodium Benzoate	ACTIVE
556-67-2	Octamethylcyclotetrasiloxane	ACTIVE

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Plaster-Weld©

· **Hazardous Air Pollutants**
Trade Secret
· **California Proposition 65:**
· **Chemicals known to cause cancer:**
None of the ingredients are listed.
· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.
· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.
· **Chemicals known to cause developmental toxicity:**
Trade Secret
· **New Jersey Right-to-Know List:**
Trade Secret
Trade Secret
· **New Jersey Special Hazardous Substance List:**
None of the ingredients are listed.
· **Pennsylvania Right-to-Know List:**
Trade Secret
Trade Secret
· **Pennsylvania Special Hazardous Substance List:**
Trade Secret E
· **Carcinogenic categories:**
· **EPA (Environmental Protection Agency):**
None of the ingredients are listed.
· **TLV (Threshold Limit Value established by ACGIH):**
Trade Secret A4
· **NIOSH-Ca (National Institute for Occupational Safety and Health):**
None of the ingredients are listed.
· **GHS label elements** Non-Regulated Material
· **Hazard pictograms:** Non-Regulated Material
· **Signal word:** Non-Regulated Material
· **Hazard statements:** Non-Regulated Material
· **National regulations:**
None of the ingredients are listed.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of last revision/ revision number:** 08/20/2019 / 2
· **Abbreviations and acronyms:**
ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 *Reviewed on 08/20/2019*

Trade Name: Plaster-Weld©

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

**** Data compared to the previous version altered.***

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

1 Identification

· **Product Identifier**

· **Trade Name: Weld-Crete©**
· **Relevant identified uses of the substance or mixture and uses advised against:**
· **Product Description:** Surface applied bonding agent for interior surfaces.

· **Details of the Supplier of the Safety Data Sheet:**
· **Manufacturer/Supplier:**
Larsen Products Corp.
8264 Preston Court
Jessup, MD 20794
P: 301-776-4595
F: 301-776-2723
jlasen@larsenproducts.com
www.larsenproducts.com
· **Emergency telephone number:** 800-633-6668

2 Hazard(s) Identification

· **Classification of the substance or mixture:**
The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.

· **Label elements:**
· **Hazard pictograms:** Non-Regulated Material
· **Signal word:** Non-Regulated Material
· **Hazard statements:** Non-Regulated Material
· **Unknown acute toxicity:**
This value refers to knowledge of known, established toxicological or ecotoxicological values.
0 % of the mixture consists of component(s) of unknown toxicity.
· **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
· **NFPA ratings (scale 0 - 4)**

Health = 0
Fire = 1
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0
Fire = 1
Physical Hazard = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of substances listed below with non-hazardous additions.
· **Dangerous Components:**

Trade Secret — STOT RE 2, H373; Acute Tox. 4, H302 — ≤2.5%

· **Additional information:**
The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

(Contd. on page 2)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Weld-Crete©

4 First-Aid Measures

· **Description of first aid measures**
· **General information:** No special measures required.
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in the side position for transportation.
· **After skin contact:** If skin irritation occurs, consult a doctor.
· **After eye contact:**
If eye irritation occurs, consult a doctor.
Rinse opened eye for several minutes under running water.
· **After swallowing:** If swallowed and symptoms occur, consult a doctor.
· **Information for doctor**
· **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

5 Fire-Fighting Measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
· **For safety reasons unsuitable extinguishing agents:** No further relevant information.
· **Special hazards arising from the substance or mixture:** No further relevant information available.
· **Advice for firefighters**
· **Special protective equipment for firefighters:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures:** Not required.
· **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
· **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**
· **PAC-1:**

9002-89-5	Poly(vinyl alcohol)	24 mg/m³
	Trade Secret	30 ppm
	Trade Secret	2.3 ppm
532-32-1	Sodium Benzoate	61 mg/m³
556-67-2	Octamethylcyclotetrasiloxane	30 ppm

· **PAC-2:**

9002-89-5	Poly(vinyl alcohol)	270 mg/m³
	Trade Secret	150 ppm

(Contd. on page 3)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Weld-Crete©

	Trade Secret	25 ppm
532-32-1	Sodium Benzoate	680 mg/m³
556-67-2	Octamethylcyclotetrasiloxane	68 ppm
· **PAC-3:**		
9002-89-5	Poly(vinyl alcohol)	1,600 mg/m³
	Trade Secret	900 ppm
	Trade Secret	150 ppm
532-32-1	Sodium Benzoate	810 mg/m³
556-67-2	Octamethylcyclotetrasiloxane	130 ppm

7 Handling and Storage

· **Handling**
· **Precautions for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters:**

· **Components with occupational exposure limits:**

Trade Secret

TLV Short-term value: 10** mg/m³, 50* ppm
Long-term value: 25* ppm
*vapor fraction:**inh. fraction, aerosol only

WEEL I (2)

· **Additional information:** The lists that were valid during the creation of this SDS were used as basis.

· **Exposure controls:**
· **Personal protective equipment**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
· **Breathing equipment:** Not required.
· **Protection of hands:** Not required.
· **Material of gloves:** Not applicable.
· **Penetration time of glove material:** Not applicable.

(Contd. on page 4)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Weld-Crete©

· **Eye protection:**

Goggles recommended during refilling.

· **Limitation and supervision of exposure into the environment:** None

*

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Liquid
Color:	Blue
· **Odor:**	Mild
· **Odor threshold:**	Not determined.
· **pH-value @ 20 °C (68 °F):**	4-5
· **Change in condition**	
Melting point/Melting range:	Not determined.
Boiling point/Boiling range:	≥100 °C (≥212 °F)
· **Flash point:**	>113 °C (>235.4 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	Not applicable
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not self-igniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure @ 20 °C (68 °F):**	≤23 hPa (≤17.3 mm Hg)
· **Density:**	
Relative density:	Not determined.
Vapor density:	Not determined.
Evaporation rate:	Not determined.
· **Solubility in / Miscibility with:**	
Water:	Miscible
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
VOC content:	.85 % 15.6 g/l / 0.13 lb/gal
· **Other information:**	No further relevant information available.

(Contd. on page 5)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Weld-Crete©

10 Stability and Reactivity

· ***Reactivity:*** No further relevant information available.
· ***Chemical stability:***
· ***Thermal decomposition / conditions to be avoided:*** No decomposition if used according to specifications.
· ***Possibility of hazardous reactions:*** No dangerous reactions known.
· ***Conditions to avoid:*** No further relevant information available.
· ***Incompatible materials:*** No further relevant information available.
· ***Hazardous decomposition products:*** No dangerous decomposition products known.

11 Toxicological Information

· ***Information on toxicological effects:***
· ***Acute toxicity:***
· ***LD/LC50 values that are relevant for classification:***

Trade Secret

Oral	LD50	5,840 mg/kg (Rat)
Dermal	LD50	9,530 mg/kg (Rabbit)
Inhalative	LC50/96 hours	38.109 mg/l (Trout)
	LC50/48 hrs	16.103 mg/l (Daphnia)

· ***Primary irritant effect:***
· ***On the skin:*** No irritating effect.
· ***On the eye:*** No irritating effect.
· ***Additional toxicological information:***
The product shows the following dangers according to internally approved calculation methods for preparations:

· ***Carcinogenic categories:***
· ***IARC (International Agency for Research on Cancer):***
Group 1 - Carcinogenic to humans
Group 2A - Probably carcinogenic to humans
Group 2B - Possibly carcinogenic to humans
Group 3 - Not classifiable as to its carcinogenicity to humans
Group 4 - Probably not carcinogenic to humans
9002-89-5 Poly(vinyl alcohol) 3

· ***NTP (National Toxicology Program):***
None of the ingredients are listed.

· ***OSHA-Ca (Occupational Safety & Health Administration):***
None of the ingredients are listed.

12 Ecological Information

· ***Toxicity:***
· ***Aquatic toxicity:***

Trade Secret

EC50 3.536 mg/l (Green algae)

· ***Persistence and degradability:*** No further relevant information available.
· ***Behavior in environmental systems:***
· ***Bioaccumulative potential:*** No further relevant information available.
· ***Mobility in soil:*** No further relevant information available.

(Contd. on page 6)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Weld-Crete©

· **Additional ecological information:**
· **General notes:**
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment:**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Observe all federal, state and local environmental regulations when disposing of this material.

· **Uncleaned packaging**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

· **UN-Number:**
· **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
· **UN proper shipping name:**
· **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
· **Transport hazard class(es):**

· **DOT, ADR/ADN, ADN, IMDG, IATA**
· **Class:** Non-Regulated Material
· **Packing group:**
· **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
· **Environmental hazards:** Not applicable.
· **Special precautions for user:** Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
· **UN "Model Regulation":** Non-Regulated Material

15 Regulatory Information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
· **SARA (Superfund Amendments and Reauthorization):**
· **Section 355 (extremely hazardous substances):**
None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**
Trade Secret

· **TSCA (Toxic Substances Control Act):**

7732-18-5	Water, distilled water, deionized water	ACTIVE
9002-89-5	Poly(vinyl alcohol)	ACTIVE
	Trade Secret	ACTIVE
	Trade Secret	ACTIVE
532-32-1	Sodium Benzoate	ACTIVE
556-67-2	Octamethylcyclotetrasiloxane	ACTIVE

(Contd. on page 7)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 Reviewed on 08/20/2019

Trade Name: Weld-Crete©

· **Hazardous Air Pollutants**
Trade Secret
· **California Proposition 65:**
· **Chemicals known to cause cancer:**
None of the ingredients are listed.
· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.
· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.
· **Chemicals known to cause developmental toxicity:**
Trade Secret
· **New Jersey Right-to-Know List:**
Trade Secret
Trade Secret
· **New Jersey Special Hazardous Substance List:**
None of the ingredients are listed.
· **Pennsylvania Right-to-Know List:**
Trade Secret
Trade Secret
· **Pennsylvania Special Hazardous Substance List:**
Trade Secret E
· **Carcinogenic categories:**
· **EPA (Environmental Protection Agency):**
None of the ingredients are listed.
· **TLV (Threshold Limit Value established by ACGIH):**
Trade Secret A4
· **NIOSH-Ca (National Institute for Occupational Safety and Health):**
None of the ingredients are listed.
· **GHS label elements** Non-Regulated Material
· **Hazard pictograms:** Non-Regulated Material
· **Signal word:** Non-Regulated Material
· **Hazard statements:** Non-Regulated Material
· **National regulations:**
None of the ingredients are listed.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· **Date of last revision/ revision number:** 08/20/2019 / 4
· **Abbreviations and acronyms:**
ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

(Contd. on page 8)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 08/20/2019 *Reviewed on 08/20/2019*

Trade Name: Weld-Crete©

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· **** Data compared to the previous version altered.***

Section 1: Product and Company Identification

Product Name

XP Gypsum Board

Product Identifiers

XP® Gypsum Board ½" Regular
XP® Gypsum Board ½" FSC
XP® Gypsum Board 5/8" FS
XP® Gypsum Board 5/8" FSC
¾" Ultra-Shield™ XP® Gypsum Board

Other means of identification

Wallboard, Gypsum Board. Plasterboard, Drywall

Recommended Use

Interior building walls, elevator shaft construction, Area Separation Wall Systems. Use per manufacturer's recommendations.

Restrictions on Use

Use in well-ventilated area and avoid breathing dust.
Avoid skin contact.

Manufacturer/Supplier Details

National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

Emergency Telephone Number

Director Quality Services
(704) 551-5820 - 24 Hour Emergency Response
Website: www.nationalgypsum.com

Section 2: Hazards Identification

United States (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS Classification of the substance or mixture

Not classified

GHS Label Elements

Pictogram	None
Signal Word	None
Hazard Statements	None

Precautionary Statements

Prevention

Do not breathe dust.
Use personal protective equipment as required. (See Section 8)
Use engineering controls and wet methods to minimize dust.

Response

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If on skin, wash with plenty of soap and water.
If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical attention if exposed or concerned.

Storage

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

Disposal
Dispose of material in accordance with federal, state, and local regulations

Section 3: Composition/Information on Ingredients

Chemical Name	Common name/ Synonym	Identifiers CAS Number	% (weight)	Impurities
Calcium Sulfate Dihydrate	Gypsum	13397-24-5	>85	Crystalline silica (CAS # 14808-60-7)
Cellulose	Paper Fiber	9004-34-6	<10	

Section 4: First-Aid Measures

Inhalation Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

Eye contact Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

Skin contact Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

Ingestion This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

Medical Conditions aggravated by exposure
Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

Section 5: Fire-Fighting Measures

Extinguishing Media
Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.
Unusual Fire and Explosion Hazards
Mixture poses no fire-related hazard.
Special hazards arising from the mixture
None known. Above 1450° C, material can decompose and release sulfur dioxide (SO_2) and oxides of carbon.
Special Protective Equipment and Precautions for Firefighters
A SCBA is recommended to limit exposures to combustion products when fighting any fire.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
No special precautions required.
General recommendations:
Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

Environmental precautions
This product does not present an ecological hazard to the environment.
Dispose of in accordance with applicable federal, state, and local regulations.

Methods and materials for containment and cleaning up

Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged/scraped material for recycling. Sweep or vacuum remaining material into a waste container for disposal. Use a light water spray to minimize dust generation. Maintain proper ventilation to minimize dust.

Section 7: Handling and Storage

Precautions for safe handling

Avoid breathing dust.
Minimize generation of dust.
Provide appropriate exhaust ventilation at places where dust is formed.
Avoid contact with eyes, skin and clothing.
Wear recommended personal protective equipment when handling. (See Section 8)

Conditions for safe storage, including any incompatibilities

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.
Store panels flat to minimize damage and warping.
Do not stack panels too high when storing to minimize the risk of falling.

Section 8: Exposure Controls/Personal Protection

Control Parameters

	Exposure Limits	
Component	**OSHA PEL** (mg/m3)	**ACGIH TLV** (mg/m3)
Calcium Sulfate Dihydrate	15 (T) 5 (R)	10 (T)
Crystalline Silica[1]	[(10) / (%SiO2+2)] (R); [(30) / (%SiO2+2)] (T)	0.025 (R)
Cellulose	15 (T) 5 (R)	10 (T)

T-Total Dust R-Respirable Dust 1-Present as an impurity in raw materials

Exposure Controls

Appropriate Engineering Controls

Work/Hygiene Practices: Utilize methods to minimize dust production. Utilize wet methods, when appropriate, to reduce generation of dust.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

Personal Protective Equipment

Respiratory Protection

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

Eye Protection

Safety glasses or goggles.

Skin

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

Section 9: Physical and Chemical Properties

a) Appearance: Paper-faced gypsum board with white/gray core
(b) Odor: None
(c) Odor threshold: Not available
(d) pH : ~7
(e) Melting point/freezing point: Not Available
(f) Initial boiling point and boiling range: Not Available
(g) Flash point: Not available
(h) Evaporation rate: Not available
(i) Flammability (solid, gas): Not flammable
(j) Upper/lower flammability or explosive limits: Not available

(k) Vapor pressure: Not available
(l) Vapor density: Not available
(m) Relative density: 2.3 g/cc
(n) Solubility(ies): 2.1 g/L @ 20° C
(o) Partition coefficient: n-octanol/water: Not available
(p) Auto-ignition temperature: Not available
(q) Decomposition temperature: 1450°C
(r) Viscosity: Not available
(s) Volatile organic compound (VOC) content: None

Section 10: Stability and Reactivity

(a) Reactivity: No data available
(b) Chemical stability: Stable in dry environments
(c) Possibility of hazardous reactions: None known
(d) Conditions to avoid (e.g., static discharge, shock, or vibration): None known
(e) Incompatible materials: None
(f) Hazardous decomposition products: None known. Above 1450° C gypsum will decompose to calcium oxide (CaO), with releases of sulfur dioxide (SO_2) and various oxides of carbon.

Section 11: Toxicological Information

Information on Toxicological effects
Information on likely routes of exposure

Ingestion	Not a likely route of exposure. May result in obstruction or temporary irritation of the digestive tract.
Inhalation	Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)
Skin contact	May cause irritation, dry skin or dermatitis.
Eye contact	May cause mechanical irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease, and lung cancer.
Continued and prolonged contact may result in dry skin. Contact with dust and/or fiberglass may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

Toxicological data
No toxicological data is available for this product. Toxicological information for components of this product listed below.

Acute toxicity	Gypsum: [OECD TG 420, Fixed dose procedure] Oral LD50 > 2,000-mg/kg b.w. for female rats (Sprague-Dawley)
Skin corrosion/irritation	Gypsum was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]
Serious eye damage/eye irritation	Not available
Skin sensitization	There is no indication of skin sensitization in guinea pigs [OECD TG 406].
Respiratory sensitization	Not available
Sensitization	Not available
Mutagenicity	No evidence of mutagenicity on Ames Test.
Carcinogenicity	Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

Section 11: Toxicological Information (Continued)

Reproductive effects	Not available
Specific target organ toxicity – single exposure	Not available
Aspiration toxicity	Not available

Section 12: Ecological Information

(a) Ecotoxicity (aquatic and terrestrial, where available): This product does not present an ecological hazard to the environment.
(b) Persistence and degradability: Unknown
(c) Bioaccumulative potential: Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
(d) Mobility in soil: Unknown
(e) Other adverse effects (such as hazardous to the ozone layer): None known

Section 13: Disposal Considerations

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14: Transport Information

This product is not a DOT hazardous material
Shipping Name: Same as product name
ICAO/IATA/IMO: Not applicable

Section 15: Regulatory Information

All ingredients are included on the TSCA inventory.
Federal Regulations
SARA Title III: Not listed under Sections 302, 304, and 313
CERCLA: Not listed
RCRA: Not listed
OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.
State Regulations
California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.
Canada WHMIS
All components of this product are included in the Canadian Domestic Substances List (DSL).
Crystalline silica: WHMIS Classification D2A

Section 16: Other Information

SDS Prepared by: National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
Phone Number: (704) 551-5820

Date of Preparation: April 20, 2015

Revision indicators and Date
Effective Date Change: 03/22/17 Supersedes: December 15, 2015
Format Changes: Added ¾" Ultra-Shield XP Gypsum Board

Key to Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Disclaimer of Liability:
As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

SAFETY DATA SHEET

Vendee and third persons assume the risk of injury proximately caused by the material if reasonable safety procedures are not followed as provided for in the data sheet and vendor shall not be liable for such injury. Furthermore, vendor shall not be liable for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed.

All persons using this product, all persons working in an area where this product is used, and all persons handling this product should be familiar with the contents of this data sheet, posting this document for employee notification is recommended by the vendor.

I. Product Identification

Manufacturer's Name	NELCO Worldwide
Address	2 Burlington Woods Drive, Suite 300, Burlington, MA 01803
Telephone	781-933-1940
Emergency Phone	855-205-2992
Trade Names	Lead with 0-9% Antimony
Synonyms	Lead Products
Intended Use	Medical, Industrial and Commercial

II. Hazards Identification

Lead in sheet or massive form is not a significant hazard. However the following information is relevant if lead dust, fume or vapor is produced during use or storage.

GHS CLASSIFICATION

Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 3)
Carcinogenicity (Category 2)
Reproductive toxicity (Category 1A)
Specific target organ toxicity – repeated exposure (Category 1)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

GHS Label Elements, including precautionary statements

Signal Word: Danger

Hazard Statements	
H302	Harmful if swallowed
H331	Toxic if inhaled
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
410	Very toxic to aquatic life with long lasting effects

Precautionary Statements	
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/respiratory protection.
P301, P312 + P330	If swallowed: Rinse mouth. Call a poison center/doctor if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P304, P340 + P314	If inhaled: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal facility in accordance with local, state and federal regulations.

III. Composition and Information on Ingredients

MATERIAL OR COMPONENT (CAS #)	WEIGHT (%)
Lead CAS# 7439-92-1 EC # 231-100-4	91 - 99.9
Antimony CAS# 7440-36-0 EC # 231-146-5	0 - 9

IV. First Aid Measures

ROUTES OF EXPOSURE WHEN PROCESSING OR HANDLING	
Inhalation	Dust, vapors, and/or fumes may be irritating to the respiratory system and can result in both acute and chronic overexposure.
Skin Contact	Dust, vapors, and/or fumes may cause irritation.
Skin Absorption	Dust, vapors, and/or fumes are not readily absorbed through the skin.
Eye Contact	Dust, vapors, and/or fumes may cause irritation.
Ingestion	Dust, vapors, and/or fumes may be absorbed by the digestive system, and can result in both acute and chronic overexposure.
EFFECTS OF OVEREXPOSURE	
Acute Overexposure	If left untreated, metallic taste in mouth, weakness, vomiting, colic, loss of appetite and weight, uncoordinated body movements, convulsions, stupor, diarrhea, bloody stools, and possible coma may occur.
Chronic Overexposure	If left untreated, weakness, insomnia, hypertension, slight irritation to skin and eyes, metallic taste in mouth, anemia, constipation, headache, muscle and joint pains, neuro-muscular dysfunction, possible paralysis and encephalopathy, metal fume fever, loss of appetite, nausea, and pneumoconiosis may ensue.
EMERGENCY AND FIRST AID PROCEDURES	
Inhalation	Remove from exposure and get medical attention if experiencing effects of overexposure.
Skin	Wash thoroughly with soap and water.
Eyes	Flush with copious quantities of water and get immediate medical attention.
Ingestion	Get immediate medical attention.

NOTES TO PHYSICIAN
Lead and its inorganic compounds are neurotoxins, which may produce peripheral neuropathy. For an overview of the effects of lead exposure, consult Occupational Safety and Health Administration Appendix A of Occupational Exposure to Lead (29CFR1910.1025).

V. Firefighting Measures

Flash Point (Test Method)	N/A
Auto Ignition Temperature	N/A
Flammable Limits in Air – Lower (% by Volume)	N/A
Flammable Limits in Air – Upper (% by Volume)	N/A
Extinguishing Media	Dry chemical or carbon dioxide, water fog or liquid foam should be used on surrounding fire. Do not use water on fires where molten metal is present. The rapid expansion of steam could cause an explosion.
Special Firefighting Procedures	Use full body protective clothing and full face piece, self-contained breathing apparatus operated in positive-pressure mode.
Unusual Fire and Explosion Hazard	Molten metals produce dust, vapors, and/or fumes that may be toxic and/or respiratory irritants. May release toxic fumes of antimony oxide or stibine gas under fire conditions. The product, or its dust, can react vigorously with strong oxidizing agents.

VI. Accidental Release Measures

If Material is Released or Spilled	Dust material should be vacuumed with high-efficiency particulate air filter vacuum or wet swept where vacuuming is not feasible. Particulate matter should be stored in dry containers for later disposal. Do not use compressed air or dry sweeping as a means of cleaning.
Neutralizing Chemicals	N/A
Waste Disposal Method	Dispose of toxic substances and hazardous wastes in accordance with local, state, and federal regulations.

VII. Handling and Storage

Precautions for Safe Handling	• There are two major routes of entry of inorganic lead: inhalation and ingestion. Most inhalation exposure can be prevented with adequate use of ventilation and respiratory protection. • Always exercise good personal hygiene prior to eating, smoking or applying cosmetics. These activities should be confined to non-contaminated areas. • Do not smoke while using product. • Work clothes and equipment should remain in designated lead contaminated areas and should never be taken home or laundered with personal clothing. • User should be careful not to inhale fumes from soldering, welding, cutting or brazing processes. • Launder contaminated clothing before reuse. • Wash hands, face, neck, and arms thoroughly before eating, smoking, or applying cosmetics. • The product is intended for industrial, commercial, and domestic use, and should be isolated from children and their environment.

Other Handling and Storage Requirements	• Store in dry area. • Avoid contact with acids. • Avoid skin contact. • Adhere to all personal protection equipment procedures when handling. • Adhere to all ventilation requirements when heavy metal exposure limits exceed permissible limits or threshold limit values. • *Before using this product,* be familiar with the information contained in the Federal OSHA Standard for Occupational Exposure to Lead (29CFR1910.1025 and 29CFR1926.62) or the California OSHA Standard for Occupational Exposure to Lead (8CCR1532.1, 8CCR5155 and 8CCR5198).

VIII. Exposure Controls and Personal Protective Equipment

Exposure Limits	
0.01 mg/m^3	Lead – California OSHA Permissible Exposure Limit (PEL), 8-hour TWA 8CCR1532.1, 8CCR5155 and 8CCR5198
0.05 mg/m^3	Lead - OSHA Permissible Exposure Limit (PEL), 8-hour TWA 29CFR1910.1025 and 29CFR1926.62
0.05 mg/m^3	Lead - ACGIH Threshold Limit Value (TLV), 8-hour TWA Confirmed animal carcinogen with unknown relevance to humans
0.05 mg/m^3	Lead - NIOSH Recommended Exposure Limit (REL), 8-hour TWA Appendix C
0.5 mg/m^3	Antimony – OSHA Permissible Exposure Limit (PEL), 8-hour TWA
0.5 mg/m^3	Antimony – ACGIH Threshold Limit Value (TLV), 8-hour TWA
0.5 mg/m^3	Antimony - NIOSH Recommended Exposure Limit (REL), 8-hour TWA
Engineering Controls	
Ventilation Requirements	Ventilation, as described in the *Industrial Ventilation Manual* produced by the American Conference of Government Industrial Hygienists, shall be provided in areas where exposures exceed the permissible exposure limits or threshold limit values specified by OSHA or other local, state, and federal regulations.
Specific Personal Protection Equipment	
Respiratory	As specified by General Industry Standard 29CFR1910.1025(f) or Construction Industry Standard 29CFR1926.62(f) of the Federal Occupational Safety and Health Administration. Other local and state regulations may also apply.
Eye	Face shield or vented goggles should be used around molten metal.
Glove	Gloves should be worn when handling the product.
Other Clothing and Equipment	Coveralls, or other full body clothing, shall be worn during product use and properly laundered after use, with the wash water disposed of in accordance with the local, state, and federal regulations. A uniform rental service is recommended for individuals with regular exposure. Hardhat, safety boots, and other safety equipment should be worn as appropriate for the industrial environment. Personal clothing and shoes should be protected from contamination with this product.

IX. Physical Data

Boiling Point @ 760 MM HG	~ 3164° F
Melting Point	~ 621° F

Specific Gravity (H_20 = 1)	~ 11.3
Vapor Pressure	N/A
Vapor Density (AIR = 1)	N/A
Solubility in H_20 (% by weight)	Negligible
% Volatiles by Volume	N/A
Evaporation Rate (Buryl Acetate = 1)	N/A
Appearance	Silver-gray metal, tarnishes
Odor	No apparent odor

X. Stability and Reactivity

Conditions Contributing to Instability	N/A
Hazardous Decomposition Products	High temperatures may produce heavy metal dust, vapors, and/or fumes
Conditions Contributing to Hazardous Polymerization	N/A
Incompatible Materials	Can react vigorously with oxidizing agents. Incompatible with acids, sodium carbide, trioxane, hydrogen peroxide, sodium azide, disodium acetylide, sodium acetylide, zirconium and ammonium salts. Antimony is spontaneously flammable with nitrates, halogens (fluorine, chlorine or bromine) and halogenated compounds. Antimony will react with nascent (freshly formed) hydrogen to form stibine (SbH3) gas which is extremely toxic.

XI. Toxicological Information

Lead product in sheet or massive form is not a significant health hazard. However the following information is relevant if lead dust, fume or vapor is produced during use or storage.	
RTECs Number	OF7525000 (Lead), CC4025000 (Antimony)
Specific Target Organ Toxicity – Acute Exposure	Gastrointestinal (Digestive), Neurological (Nervous System), Ocular (Eyes), Renal (Urinary System or Kidneys), Lungs
Specific Target Organ Toxicity – Chronic Exposure	Cardiovascular (Heart and Blood Vessels), Developmental (effects during periods when organs are developing) , Gastrointestinal (Digestive), Hematological (Blood Forming), Musculoskeletal (Muscles and Skeleton), Neurological (Nervous System), Ocular (Eyes), Renal (Urinary System or Kidneys), Reproductive (Producing Children), Lungs
Acute Toxicity to Animals	
LC50	Antimony – inhl – rat – 720 mg/m^3, Lead – N/A
LD50	Antimony – oral – rat – 7500 mg/kg, Lead – N/A
Other Information on Acute Toxicity	N/A
Skin Corrosion/Irritation	May cause irritation. Antimony exposure may cause antimony spots, which is a rash around sweat and sebaceous glands.
Serious Eye Damage/eye irritation	Particulate may cause mechanical injury. Antimony may cause ocular conjunctivitis.
Systemic Effects	
Respiratory or skin sensitization	N/A
Germ Cell Mutagenicity - Lead	
Cytotoxicity analysis	Inhalation – rat

Carcinogencity - Lead	
IARC	Group 2B – Possibly carcinogenic to humans
NTP	Reasonably anticipated to be a human carcinogen
OSHA	1910.1025
Reproductive Toxicity - Lead	
Suspected Human Reproductive Toxicant	
Rat – Inhalation	Effects on Newborn: Biochemical and metabolic
Rat – Oral	Effects on Newborn: Behavioral
Mouse – Oral	Effects on Fertility (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated). Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea.)
Teratogenicity - Lead	
Rat – Inhalation	Effects on Embryo or Fetus: Fetotoxicity (except death, e.g. stunted fetus). Specific Developmental Abnormalities: Blood and Lymphatic system (including spleen and marrow).
Rat – Oral	Specific Developmental Abnormalities: Blood and Lymphatic system (including spleen and marrow). Effects on newborn: Growth statistics (e.g., reduced weight gain).
Rat – Oral	Effects on Embryo or Fetus: Fetotoxicity (except death, e.g. stunted fetus) and Fetal death.
Mouse – Oral	Effects on Embryo or Fetus: Fetotoxicity (except death, e.g. stunted fetus) and Fetal death.

XII. Ecological Information

Lead in sheet or massive form is not a significant ecological hazard in its present form. All ecological tests were conducted with a dissolved form of lead or antimony.

Toxicity to Fish	Lead - Mortality LOEC – Oncorhynchus mykiss (rainbow trout) – 1.19 mg/l – 96 h
	Lead - LC50 – Micropterus dolomieu (smallmouth bass) – 2.2 mg/l – 96 h Antimony – LC50 – Cyprinodon variegatus (sheepshead minnow) – 6.2 – 8.3 mg/l – 96 h
	Lead - Mortality NOEC – Salvelinus fontinalis (brook trout) – 1.7 mg/l – 10 d. Antimony - Mortality NOEC – Cyprinodon variegatus (sheepshead minnow) – 6.2 mg/l – 96h
Toxicity to Daphnia	Lead - Mortality LOEC – 0.17 mg/l -24 h
	Lead - Mortality NOEC – 0.099 mg/l – 24 h
Toxicity to Algae	Lead - Mortality EC50 – Skeletonema costatum – 7.94 mg/l – 10 d
Persistence and degradability	N/A
Mobility in soil	N/A
PBT and vPvB assessment	N/A
Other adverse effects	Very toxic to aquatic life with long lasting effects.

XIII. Disposal Considerations

Dispose of toxic substances and hazardous wastes in accordance with local, state, and federal regulations.

XIV. Transport Information

Not regulated as hazardous for transport.

XV. Regulatory Information

OSHA Hazards	Carcinogen, Target Organ Effect, Harmful by Ingestion, Teratogen
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	Subject to reporting levels established by SARA Title III, Section 313.
Massachusetts Right to Know Components	Lead CAS #7439-92-1, Revision Date 1994-04-01 Antimony CAS#7440-36-0, Revision Date 2007-07-01
Pennsylvania Right to Know Components	Lead CAS #7439-92-1, Revision Date 1994-04-01 Antimony CAS#7440-36-0, Revision Date 2007-07-01
New Jersey Right to Know Components	Lead CAS #7439-92-1, Revision Date 1994-04-01 Antimony CAS#7440-36-0, Revision Date 2007-07-01
California Proposition 65 Warning	**WARNING:** This product can expose you to Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

XVI. Other Information

Date of revision	February 25, 2025
NELCO Worldwide believes that this information is correct, however, we cannot guarantee that it is all inclusive. No warranty is made, express or implied, and NELCO Worldwide assumes no liability resulting from its use.	

Prepared by: NELCO Worldwide
Address: 2 Burlington Woods Drive, Suite 300, Burlington, MA 01803

ProForm®
Ready Mix Joint Compounds

SDS05002

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

ProForm® Joint Treatment Products & Ready Mix Joint Compounds

IDENTIFIERS

ProForm® All Purpose Joint Compound
ProForm® All Purpose Heavy Viscosity Joint Compound
ProForm® All Purpose Machine Grade Joint Compound
ProForm® All Purpose Orange Joint Compound
ProForm® All Purpose Texture Grade Joint Compound
ProForm® Factory Built Housing Texture Grade Compound
ProForm® All Purpose with Dust-Tech® Joint Compound
ProForm® Concrete Cover Compound
ProForm® Lite Joint Compound
Advantage™ All Purpose Joint Compound
Easy Finish® Topping Compound
ProForm® Lite Blue™ Joint Compound
ProForm® Lite Blue™ with Dust-Tech® Joint Compound
ProForm® Multi-Use Joint Compound
ProForm® Taping Joint Compound
ProForm® Taping Lite Joint Compound
ProForm® Tinted Lite™ Joint Compound
ProForm® Topping Joint Compound
ProForm® Ultra Lite® All Purpose Joint Compound
ProForm® Lite with Dust-Tech®
Advantage Lite™ Joint Compound
Easy Finish® Joint Compound

OTHER MEANS OF IDENTIFICATION

Joint Compound, Taping Compound, Gypsum Board Finishing Compound

RECOMMENDED USE

All-purpose drying-type compounds used for finishing gypsum board products. Use per manufacturer's recommendations.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
Website: **proformfinishing.com**

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company
(704) 551-5820 - 24 Hour Emergency Response
National Gypsum Company is the exclusive service provider for products manufactured by ProForm Finishing Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Carcinogenicity - Category 1A (H-350)
Specific target organ toxicity, repeated exposure – Category 1 (H-372)
Acute toxicity, inhalation - Category 4 (H-332)
Skin corrosion/irritation - Category 2 (H-315)

PICTOGRAM

SIGNAL WORD

Health Hazard

HAZARD STATEMENTS

H-350 May cause cancer.
H-332, 372 Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.
H-315 Causes skin corrosion/irritation

PRECAUTIONARY STATEMENTS

ProForm® Finishing Products

PREVENTION

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust.
Use personal protective equipment as required. (See Section 8)
Use engineering controls and wet methods to minimize dust.

RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)
Calcium Carbonate or Calcium/Magnesium Carbonate	Limestone, Dolomite	1317-65-3 16389-88-11	>50
And may contain one or more of the following:			
Mixture-silicates and aluminates	Mica	12001-26-2	<10
Mixture-various metal oxides	Perlite	93763-70-3	<10
Magnesium aluminum phyllosilicate	Attapulgite Clay	12174-11-7	<5
Magnesium silicate	Sepiolite Clay	63800-37-3	<5
Magnesium aluminum phyllosilicate	Smectite Clay	1302-78-9	<5
Polyvinyl Acetate Latex		9003-20-7	<5
Ethylene Vinyl Alcohol		24937-78-8	less than 5%

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

This product is not expected to be hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Mixture poses no fire-related hazard.

SPECIAL HAZARDS ARISING FROM THE MIXTURE
None known.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS
A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
No special precautions required

General recommendations:
Wear appropriate Personal Protective Equipment. (See Section 8)
Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS
This product does not present an ecological hazard to the environment. Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP
Shovel or scoop spilled material back into container for use, if possible, or disposal. Maintain proper ventilation to minimize dust. Avoid washing material down drains. This material will eventually set and can cause clogs.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING
Avoid breathing vapors when opening container. Avoid breathing dust. Minimize generation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin and clothing. Wear recommended personal protective equipment when handling. (See Section 8).

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES
Store material in a cool, dry, ventilated area, away from excessive heat or sunlight. Keep from freezing to preserve usefulness. Keep containers closed when not in use. Avoid contact with strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters **Exposure Limits**

COMPONENT	OSHA PEL mg/m³	ACGIH TLV mg/m³
Calcium Carbonate or Dolomite (limestone)	15(T) 5(R)	10(T)
Mica	20 mppcf	3
Perlite	15(T) 5(R)	10(T) 3(R)
Attapulgite Clay	15(T) 5(R)	1 f/cc(R)
Sepiolite Clay	15(T) 5(R)	
Smectite Clay	15(T) 5(R)	
Crystalline Silica[1]	[(10) / (%SiO2+2)](R) [(30) / (%SiO2+2)] (T)	
Polyvinyl Acetate Latex	NE	NE
Ethylene Vinyl Acetate Latex	NE	NE

T - Total Dust R - Respirable Dust 1 - Present as an impurity in raw materials NE - None Established mppcf - million particles per cubic foot

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS
Work/Hygiene Practices: Utilize methods to minimize dust production. Use sanders equipped with vacuum capabilities whenever possible. Utilize a light water spray when feasible.
Ventilation: Provide local and general exhaust ventilation sufficient to maintain a dust level below the PEL/TLV.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.

EYE PROTECTION

Safety glasses or goggles.

SKIN

Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a. **Appearance:** A white to gray paste
b. **Odor:** Mild latex initially, Low to none after opening.
c. **Odor threshold:** Not available
d. **pH:** 7-9
e. **Melting point/freezing point:** Not Available
f. **Initial boiling point and boiling range:** Not Available
g. **Flash point:** Not available
h. **Evaporation rate:** Not available
i. **Flammability (solid, gas):** Not flammable
j. **Upper/lower flammability or explosive limits:** Not available
k. **Vapor pressure:** Not available
l. **Vapor density:** Not available
m. **Relative density:** ~1.0-1.8
n. **Solubility(ies):** slightly soluble in water
o. **Partition coefficient: n-octanol/water:** Not available
p. **Auto-ignition temperature:** Not available
q. **Decomposition temperature:** 825° C
r. **Viscosity:** Not available
s. **Volatile organic compound (VOC) content:** <2 g/l

SECTION 10: STABILITY AND REACTIVITY

a. **Reactivity:** No data available
b. **Chemical stability:** Stable in dry environments
c. **Possibility of hazardous reactions:** None known
d. **Conditions to avoid (e.g., static discharge, shock, or vibration):** None known
e. **Incompatible materials:** Strong acids
f. **Hazardous decomposition products**: None known. Above 825° C limestone ($CaCO_3$) decomposes to calcium oxide (CaO) and carbon dioxide (CO_2).

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION

Possible abdominal obstruction.

INHALATION

Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT

May cause irritation, dry skin or dermatitis.

EYE CONTACT

May cause mechanical irritation.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease. (Silicosis and/or lung cancer).

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY

Not available

SKIN CORROSION/IRRITATION
Not available

SERIOUS EYE DAMAGE/EYE IRRITATION
Not available

SKIN SENSITIZATION
Not available

RESPIRATORY SENSITIZATION
Not available

SENSITIZATION
Not available

MUTAGENICITY
Not available.

CARCINOGENICITY
Not available

This product contains crystalline silica (quartz) as a naturally occurring impurity in some of the raw materials. The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.

Exposures to respirable crystalline silica are not expected during the recommended use of this product. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted utilizing recommended application procedures. However, actual levels must be determined by workplace hygiene testing.

REPRODUCTIVE EFFECTS Not available

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE Not available

ASPIRATION TOXICITY Not available

SECTION 12: ECOLOGICAL INFORMATION

a. **Ecotoxicity (aquatic and terrestrial, where available):** This product does not present an ecological hazard to the environment.
b. **.Persistence and degradability:** Unknown
c. **Bioaccumulative potential:** Limestone is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.
d. **Mobility in soil:** Unknown
e. **Other adverse effects (such as hazardous to the ozone layer):** None known

SECTION 13: DISPOSAL CONSIDERATIONS

This material is not considered a hazardous waste. Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.

Shipping Name: Same as product name

ICAO/IATA/IMO: Not applicable

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed

RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

STATE REGULATIONS: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

CANADA WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).
Crystalline silica: WHMIS Classification D2A.

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
(704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
HEPA	High Efficiency Particulate Air
HCS	Hazard Communications Standard
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMO	International Maritime Organization
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

DISCLAIMER OF LIABILITY:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.

National Gypsum.

National Gypsum Company is the exclusive service provider for products manufactured by ProForm Finishing Products, LLC.

PROFORM® Finishing Products

ProForm Finishing Products, LLC
2001 Rexford Road
Charlotte, NC 28211
704.365.7300
proformfinishing.com

Formaldehyde-Free™ Fiberglass Building Insulation

Version 2.0 | Revision Date 03/27/2025 | Print Date 03/27/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name	:	Basement Wall, Castlegard, Cavity-SHIELD™, ComfortTherm®, Condensation Control Blanket, Foil-Faced Batts and Rolls, FSK-25 Faced Batts, Kraft-Faced Batts and Rolls, Manufactured Housing, MICRO-PAK®, Microlite® "L", Pan-Insul®, Panel Deck FSK-25 and PSK Faced Batts, PEBS Blanket™, Pre-Engineered Wood Framing Batts and Rolls, Sound-SHIELD®, UMBI®, Unfaced Batts and Rolls

Manufacturer or supplier's details

Company	:	Johns Manville
Address	:	P.O. Box 5108 Denver, CO USA 80217-5108
Telephone	:	+1-303-978-2000
Emergency telephone number	:	24-Hour Number: +1-800-424-9300 (CHEMTREC)
Company	:	Johns Manville Canada Inc.
Address	:	5301 42 Avenue Innisfail, AB Canada T4G 1A2
Telephone	:	+1-303-978-2000
Emergency telephone number	:	24-Hour Number: +1-800-424-9300 (CHEMTREC)

Recommended use of the chemical and restrictions on use

Recommended use	:	thermal and/or acoustic insulation
Prepared by	:	productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Regulations

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Article

Hazardous components

Non-hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Regulations, when used as intended.

SECTION 4. FIRST AID MEASURES

General advice	:	Get medical attention if symptoms occur.
If inhaled	:	Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	:	Remove contaminated clothing and shoes. If on skin, rinse well with water. Get medical attention if irritation develops and persists. Wash contaminated clothing before re-use.
In case of eye contact	:	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
If swallowed	:	If symptoms persist, call a physician. Rinse mouth with water to remove dust or fibers and drink plenty of water to help reduce irritation.
Most important symptoms and effects, both acute and delayed	:	Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact. Abrasion effects should subside after cessation of exposure.
Protection of first-aiders	:	If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	:	Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Carbon dioxide (CO_2) Foam Dry powder Water
Unsuitable extinguishing media	:	none
Specific hazards during firefighting	:	Under the influence of high temperatures, e.g. during a fire in the warehouse, decomposition products like carbon oxide may be released due to the low content of organic compounds.
Hazardous combustion products	:	carbon oxides nitrogen oxides Hydrocarbons
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid dust formation.
Environmental precautions	:	Should not be released into the environment.
Methods and materials for containment and cleaning up	:	Clean up promptly by scoop or vacuum. Pick up and arrange disposal without creating dust.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Smoking, eating and drinking should be prohibited in the application area. Minimize dust generation and accumulation. Do not breathe vapours/dust. Do not get in eyes or mouth or on skin. For personal protection see section 8.
Conditions for safe storage	:	Keep in a dry place.
Materials to avoid	:	No materials to be especially mentioned.
Further information on storage stability	:	Stable at normal ambient temperature and pressure.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
synthetic vitreous fibers, glass wool fibers	Not Assigned	TWA	1 fibers/cm3	ACGIH
Inert or Nuisance Dust, Particulates Not Otherwise Regulated (PNOR)	Not Assigned	PEL (Total dust)	15 mg/m3	OSHA
		PEL (Respirable particulate matter)	5 mg/m3	OSHA
Fibrous glass dust	Not Assigned	TWA	3 fibers/cm3	NIOSH REL
		TWA (total)	5 mg/m3	NIOSH REL

As a member of the North American Insulation Manufacturers Association (NAIMA), Johns Manville subscribes to the NAIMA Product Stewardship Program (NPSP). Under the NPSP, Johns Manville recommends that exposures be limited to the NAIMA-OSHA voluntary Permissible Exposure Limit (vPEL) of 1 f/cc TWA. The NPSP also includes work practice and respiratory protection recommendations for exposures over the vPEL. For more information, see NAIMA's Health and Safety Reference Library (website: http://insulationinstitute.org/tools-resources/resource-library/health-safety/) to find the Product Stewardship Program Pocket Folder (N052) and other Fact Sheets.

Engineering measures : Use a local and/or general ventilation system.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other

circumstance where air purifying respirators may not provide adequate protection.

Filter type	:	Particulates
Hand protection		
Material	:	Protective gloves
Remarks	:	For prolonged or repeated contact use protective gloves.
Eye protection	:	Safety glasses with side-shields
Skin and body protection	:	Wear protective clothing, such as long-sleeved shirts and pants. Change working clothes after each workshift. Remove and wash contaminated clothing before re-use.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	solid
Colour	:	white, off-white
Odour	:	slight
Odour Threshold	:	No data available
pH	:	Not applicable
Melting point/freezing point	:	Not applicable
Initial boiling point and boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	No data available
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	No data available
Solubility(ies)		
Water solubility	:	Not applicable
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No decomposition if stored normally.
Conditions to avoid	:	None known.
Incompatible materials	:	hydrofluoric acid
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA (29 CFR 1910 Subpart Z, Toxic and Hazardous Substances).

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Further information

Product:

Remarks: Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact. Abrasion effects should subside after cessation of exposure.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information	:	Due to the properties of the product, a hazard to the environment may not be expected.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

Land transport
USDOT: Not classified as a dangerous good under transport regulations
TDG: Not classified as a dangerous good under transport regulations

Sea transport
IMDG: Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO: Not classified as a dangerous good under transport regulations

SECTION 15. REGULATORY INFORMATION

TSCA list

TSCA - 5(a) Significant New Use Rule List of Chemicals : Not relevant

U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpart D) : Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop. 65

This product does not require a warning under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

The components of this product are reported in the following inventories:

: Since these products are considered articles according to most of the international chemical regulations, they or their constituents need not be listed on the national inventories.

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 03/27/2025

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA	:	8-hour time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
OSHA / PEL	:	Permissible exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-

Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Johns Manville
A Berkshire Hathaway Company

Safety Data Sheet

Version: 1.1 **Issue Date:** 2023-02-09

1. Product and Company Identification

Product Name
TRYMER® Rigid Polyisocyanurate Insulation: 25-50, 200L, 250L, 350L, 400L, 1800, 2000XP, 2500, 3000, 4000, and 6000.

COMPANY IDENTIFICATION

Johns Manville
PO Box 5108
Denver, CO 80217-5108
USA

Customer Information Number: +1 (303) 978-2000
Emergency Number: +1 (800) 424-9300 (CHEMTREC)
Product Information: ProductSafety@jm.com

Johns Manville Canada Inc.
5301 42 Avenue
Innisfail, AB T4G 1A2
Canada

Customer Information Number: +1 (303) 978-2000
Emergency Number: +1 (800) 424-9300 (CHEMTREC)
Product Information: ProductSafety@jm.com

Recommended Uses and Restrictions
Thermal insulation for industrial and commercial use.

2. Hazards Identification

Emergency Overview

Color: Gray, Tan

Physical State: Solid (bun/billet)

Odor: Odorless

Hazards of product:

Toxic fumes may be released in fire situations.

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015)
Not a hazardous substance or mixture.

Potential Health Effects

Eye Contact: Solid or dust may cause irritation or corneal injury due to mechanical action. Fumes/vapor released during thermal operations such as hot-wire cutting may cause eye irritation.
Skin Contact: Essentially nonirritating to skin. Mechanical injury only.
Skin Absorption: Skin absorption is unlikely due to physical properties.
Inhalation: Dust may cause irritation to upper respiratory tract (nose and throat). Fumes or dusts generated from cutting or grinding operations may cause irritation of the upper respiratory tract and lungs. Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.
Ingestion: Swallowing is unlikely because of the physical state. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking or blockage of the digestive tract if swallowed.

3. Composition Information

Component	CAS #	Amount
Modified Polyisocyanurate Rigid Cellular Polymer	Not applicable	≥ 85.0%
Hydrocarbon blowing agent(s)	Not applicable	≤ 10.0%
Tris(1-chloro-2-propyl) phosphate	13674-84-5	≤ 5.0%

4. First-Aid Measures

Eye Contact: Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected. If effects occur, consult a physician, preferably an ophthalmologist.
Skin Contact: Seek first aid or medical attention as needed.
Inhalation: Move person to fresh air; if effects occur, consult a physician.
Ingestion: If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.
Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Extinguishing Media: Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.
Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Handheld dry chemical or carbon dioxide extinguishers may be used for small fires.
Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.
Unusual Fire and Explosion Hazards: When product is stored in closed containers, a flammable atmosphere can develop. Mechanical cutting, grinding, or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. Rapid bursting of a multitude of cells such as might occur during compaction of product waste for disposal will release a flammable blowing agent which can lead to the development of a flammable atmosphere in inadequately vented equipment. This product contains a flame retardant to inhibit accidental ignition from small fire sources. This plastic foam product is combustible and should be protected from flames and other high heat sources. Dense smoke is emitted when burned without sufficient oxygen.
Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Combustion products may include and are not limited to: Nitrogen oxides. Combustion products may include trace amounts of: Hydrogen cyanide. Hydrogen Halides. Aromatic hydrocarbons.

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.
Personal Precautions: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
Environmental Precautions: Prevent from entering soil, ditches, sewers, waterways and/or ground water. See Section 12, Ecological Information.

7. Handling and Storage

Exposure Limits

Component	List	Type	Value
Cyclopentane	NIOSH REL	TWA	600 ppm (1720 mg/m^3)
Pentane, all isomers	ACGIH	TWA	1000 ppm

General Handling
This material is combustible and should not be exposed to flame or other ignition sources. Refer to Exposure Controls and Personal Protection, Section 8 of the SDS. No smoking, open flames, or sources of ignition in handling and storage area. Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to assure localized concentrations in release areas are maintained below the lower flammable limit.

Other Precautions
Good housekeeping and controlling of dusts are necessary for safe handling of product.

Storage
Keep in a cool, well-ventilated place. Minimize sources of ignition, such as static build-up, heat, spark, or flame. Flammable vapors may accumulate in some storage situations. During shipment, storage, installation, and use, this material should not be exposed to flame or other ignition sources.

8. Exposure Controls / Personal Protection

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

Personal Protection
Eye/Face Protection: Eye protection should not be necessary. For fabrication operations safety glasses are recommended. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.
Skin Protection: No precautions other than clean body-covering clothing should be needed.
Hand protection: Use gloves to protect from mechanical injury. Selection of gloves will depend on the task.
Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use a NIOSH-approved air-purifying respirator. In dusty or misty atmospheres, use a NIOSH-approved particulate respirator. The following should be effective types of air-purifying respirators: Particulate filter.
Ingestion: No precautions necessary due to the physical properties of the material.

Engineering Controls
Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

9. Physical and Chemical Properties

Physical State	Solid (bun/billet)
Color	Gray, Tan
Odor	Odorless
Flash Point - Closed Cup	Not applicable
Flammable Limits in Air	**Lower**: Not applicable **Upper**: Not applicable
Autoignition Temperature	490 °C (914 °F) *ASTM D1929*

Vapor Pressure	Not applicable
Boiling Point (760 mmHg)	Not applicable
Vapor Density (air = 1)	Not applicable
Specific Gravity (water = 1)	0.02 - 0.05 *Estimated*
Freezing Point	Not applicable
Melting Point	> 150 °C (> 302 °F) *Estimated,* Decomposes
Solubility in Water	Insoluble in water
pH	Not applicable
Kinematic Viscosity	Not applicable

10. Stability and Reactivity

Stability/Instability
Thermally stable at typical use temperatures.

Conditions to Avoid
Avoid temperatures above 150 °C (302 °F). Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

Incompatible Materials
Avoid contact with strong oxidizers.

Hazardous Polymerization
Will not occur.

Thermal Decomposition
Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

11. Toxicological Information

Repeated Dose Toxicity
Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

12. Ecological Information

CHEMICAL FATE

Movement & Partitioning
No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

Persistence and Degradability
Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY
Not expected to be acutely toxic to aquatic organisms.

13. Disposal Considerations

Dispose of contents/container to an approved facility in accordance with local, regional, national, and international regulations.

14. Transport Information

DOT (Bulk / Non-Bulk)
NOT REGULATED

TDG (Bulk / Non-Bulk)
NOT REGULATED

IMDG
NOT REGULATED

ICAO/IATA
NOT REGULATED

15. Regulatory Information

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015)
Non-hazardous according to 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015), when used as intended.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	No
Delayed (Chronic) Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
This product does not require a warning under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

Toxic Substances Control Act (TSCA)
All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

CEPA - Domestic Substances List (DSL)
All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. Other Information

Revision
Revision Date: 2023-02-09

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH REL	National Institute for Occupational Safety and Health recommended exposure limits
TWA	Time Weighted Average

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

1. Identification

Product Identifier:	**Poly GlassRub 50 Clear Liquid Rubber Part B**
Product Code(s):	GLASSRUB50B
Use:	Component for Polyurethane Casting/Mold Rubber. For Industrial/Professional use only.
Manufacturer:	Polytek Development Corp. 55 Hilton St., Easton, PA 18042
Phone Number:	610-559-8620 (9 a.m. to 5 p.m. EST)
Emergency Phone:	CHEMTREC 800-424-9300 or +1 (703) 527-3887
E-mail:	sds@polytek.com

2. Hazards Identification

GHS Classification: Not classified as hazardous

Label Elements: Not classified as hazardous

Supplemental Information: May cause mild eye and skin irritation. Avoid contact with eyes, skin and clothing.

This is one part of a two-part system. Read and understand the hazard information on Part A before using.

3. Composition/Information on Ingredients

Ingredient	CAS #	%
This product is primarily alkyl polyol, plasticizer and aromatic diamine (<10%). All ingredients are NOT classified as health/physical hazards under GHS, OR are present below cut-offs/concentration limits.		

4. First-Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Get medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation persists.

Inhalation: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a doctor.

Ingestion: If swallowed, rinse mouth. Drink water. Induce vomiting only with medical supervision.

Most Important Symptoms/Effects: Mild skin and eye irritation.

Indication of Immediate Medical Attention/Special Treatment: Not expected to be required.

5. Fire-Fighting Measures

Extinguishing Media: CO_2, dry chemical, foams, or water spray.

Specific Hazards: Not classified as flammable or combustible. May generate toxic/irritating compounds and dense smoke in fire conditions.

Special Protective Equipment and Precautions for Fire-Fighters: Wear SCBA & full-body protective suit. Cool hot containers with water.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Remove all ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact.

Methods and Materials for Containment and Cleanup: Contain spill and prevent/minimize release to the environment. Absorb spilled material with an inert absorbent. Collect and containerize material. Dispose of residue in accordance with state and local regulations.

7. Handling and Storage

Safe Handling: Avoid breathing vapor. Use in well ventilated area. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke in work area. Wash hands after handling. See Section 8.

Safe Storage: Store indoors at temperatures between 60 °F and 95°F. Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Exposure Limits: No OSHA or ACGIH exposure limits apply.

Engineering Controls: Provide general and local exhaust to minimize airborne concentrations.

Personal Protective Equipment: Wear eye protection (e.g., chemical safety glasses), protective clothing and impermeable gloves (e.g., nitrile or butyl rubber). In the absence of good ventilation, use respirator equipped with organic vapor cartridges or air-supplied respirator. In emergencies, use SCBA.

Other Protective Measures: Impervious clothing is recommended to prevent skin contact and contamination of personal clothing. An eyewash and washing facility should be available in the work area.

9. Physical and Chemical Properties

Appearance: Clear, pale-green liquid
Odor: Mild
Odor Threshold: No data available
pH: Not applicable
Melting Point/Freezing Point: No data available
Boiling Point: No data available
Flash Point: >128°C (262°F)
Evap. Rate: No data available
Flamm. Limits: No data available
Vapor Pressure: ≤0.1 mm Hg @ 20°C
Vapor Density: No data available
Relative Density: 1.0 @ 25°C
Solubility: Slightly soluble in water
Partition Coefficient: n-octanol/Water: No data available
Auto-Ignition Temp: No data available
Decomposition Temp: No data available
Viscosity: 400 cP @ 25°C

10. Stability and Reactivity

Reactivity: Not normally reactive.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Reaction with strong oxidizers generates heat.

Conditions to Avoid: Excessive heat and exposure to sunlight.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: Thermal decomposition will generate oxides of carbon and phosphorus and chlorine compounds.

11. Toxicological Information

Eye Contact: May cause mild irritation.

Skin Contact: May cause mild irritation.

Inhalation: Mists may cause mild respiratory irritation.

Ingestion: Single oral dose toxicity is low. Large amounts may cause gastrointestinal effects. No other data available.

Chronic Health Effects: None known.

Acute Toxicity Values: Alkyl polyol blend: Oral rat LD50 >2,000 mg/kg; Skin rabbit LD50 >2,000 mg/kg

Germ Cell Mutagenicity: Components are not mutagens.

Carcinogenicity: None of the components are carcinogens.

Reproductive Toxicity: Components are not reproductive toxins.

Specific Target Organ Toxicity: No data available

12. Ecological Information

Ecotoxicity: This material is not classified as dangerous to aquatic organisms (Alkyl polyol blend: LC50/EC50 greater than 100 mg/L in most sensitive species).

Persistence and Degradability: Not readily biodegradable.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. Disposal Considerations

Dispose according to local, state and federal regulations.
For U.S.: Upon disposal, this product is not a RCRA hazardous waste (per 40 CFR 261).

14. Transport Information

Not regulated for transport in any mode.
EMERGENCY SHIPPING: CHEMTREC, 800-424-9300 or +1-703-527-3887

15. Regulatory Information

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA TITLE III:
Hazard Category for Section 311/312: Not Hazardous
Section 313 Toxic Chemicals: This product contains no chemicals subject to SARA Title III Section 313 Reporting requirements.
Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All components of this product are listed on TSCA.

STATE REGULATIONS:
California Proposition 65: "WARNING: This product contains a chemical known to the State of California to cause cancer." (This warning is required owing to the presence of plasticizer ingredient deemed by CA to cause cancer. But the same plasticizer is not classified as hazardous under GHS.)

16. Other Information

Training Advice: All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

Recommended Uses and Restrictions: This product is intended for industrial use only.

SDS Revision Notes: Minor changes throughout and added new CA Prop. 65 Warning in Section 15.

Disclaimer: The information contained herein is considered accurate; however, Polytek® makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.

Polytek Development Corp.

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Polytek Development Corp., 55 Hilton St., Easton, PA 18042, 610/559-8620

Product Name: **POLYGEL 40, 50 & SPRAY 50 LIQUID RUBBER PART B**

Chemical Family: Trade secret blend of polyol and aromatic diamine

2. Hazardous Constituents

Ingredient/CAS #	Exposure Limits
Polyol	None established
Aromatic diamine	None established
Proprietary aryl mercury compound (0.2%)	ACGIH TLV 0.1 mg/m^3 TWA OSHA PEL 0.1 mg/m^3 (Ceiling)

3. Health Hazards

PRIMARY ROUTE(S) OF ENTRY: Skin or eye contact, or ingestion

EYE: May cause eye irritation.

SKIN: Exposure may cause skin irritation and/or redness.

INGESTION: Toxic by ingestion (contains 0.2% of a mercury compound; also contains an aromatic diamine). May cause gastrointestinal discomfort if ingested.

INHALATION: At room temperature, vapors are minimal and material is not expected to be an inhalation hazard. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation.

CARCINOGENICITY: Not designated as a carcinogen by NTP, IARC, or OSHA.

CHRONIC EFFECTS: Long-term overexposure to mercury has been associated with central nervous system and kidney disorders. Some aryl mercury compounds have been found to cause developmental effects to fetuses in animal studies.

4. First Aid Measures

EYE CONTACT: Flush with water for 15 minutes. Seek medical attention.

SKIN CONTACT: Wipe off. Wash with soap and plenty of warm water. Seek medical attention if irritation develops.

INHALATION: Remove to fresh air. Treat symptomatically. Seek medical attention.

INGESTION: If alert, drink water to dilute, then induce vomiting. Seek medical attention.

5. Fire Fighting Measures

FLASH POINT: >370°F (estimated)

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, alcohol foam, or water fog.

HAZARDOUS COMBUSTION PRODUCTS: Likely to include carbon monoxide, carbon dioxide, nitrogen oxides, formaldehyde, mercury vapor, and unidentified toxic and irritating compounds.

OTHER INFORMATION: Firefighters wear protective gear and self-contained breathing apparatus (SCBA). A direct stream of water or foam into hot product may cause frothing and increase fire intensity.

6. Accidental Release Measures

Clear non-emergency personnel from the area. Remove sources of ignition. Contain spill to minimize environmental contamination. Absorb spilled material with non-reactive absorbent such as sawdust, vermiculite, or sand. Collect and containerize spill material. Dispose of in accordance with federal, state and local regulations.

7. Handling and Storage

HANDLING: Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Use in adequately ventilated area. Do not eat, drink or smoke in work area. Wash hands after handling. See also Section 8 of MSDS.

STORAGE: Store indoors. Do not exceed 120°F. Store in original container tightly closed.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Provide general and/or local exhaust to minimize airborne concentrations.

PERSONAL PROTECTIVE EQUIPMENT: Wear eye protection (e.g., chemical splash goggles or safety glasses), protective clothing and rubber gloves (e.g., nitrile).

RESPIRATORY PROTECTION: When hand-mixing with adequate local ventilation, respiratory protection is not normally needed. When spraying, use a positive-pressure supplied-air respirator. If unavailable, use a full-face respirator equipped with organic vapor cartridges. In emergency situations, use SCBA. Respirators must be used in compliance with OSHA's respiratory protection standard (29 CFR 1910.134).

9. Physical Characteristics

APPEARANCE: Brown or yellow liquid

ODOR: Mild odor

BOILING POINT: No data

VAPOR PRESSURE: < 1 mm Hg @ 25°C

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY: ~1.0 @ 25°C

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid excessive heat and exposure to sunlight.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers, acids, organic sulfur compounds, and aluminum.

HAZARDOUS DECOMPOSITION PRODUCTS: Potentially oxides of carbon and nitrogen, organic acids, mercury vapor, and other unidentified irritating or toxic compounds

11. Regulatory and Other Information

COMMUNITY RIGHT-TO-KNOW: This product contains the following Section 313 ingredients:

Mercury Compound	Trade secret CAS #	≤0.2 % by weight

DISPOSAL: Upon disposal, this product (uncured) is a characteristic RCRA hazardous waste (D009 - owing to mercury content) as defined in 40 CFR 261. Cured materials may be RCRA-regulated for mercury. Dispose of in accordance with federal, state and local regulations. DOT

DOT TRANSPORT: Not a hazardous material for shipping purposes based on 49 CFR Part 171.

IMDG TRANSPORT: UN 3082, Environmentally hazardous substance, liquid, n.o.s. (aromatic diamine), 9, PG III, Marine Pollutant.

CA PROPOSITION 65: "WARNING: This product contains a chemical [mercury] known to the State of California to cause birth defects or other reproductive harm."

HMIS: Health=2; Flammability=1; Reactivity=1; PPE=H

EMERGENCY SHIPPING INFORMATION: Call CHEMTREC, 800/424-9300.

REVISION INDICATOR: Revised transport information in Section 11.

DISCLAIMER: The information contained herein is considered accurate; however, Polytek makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.

Date Prepared/Revised: Sept. 17, 2010; Supersedes: Apr. 19, 2007

Ramset
DRIVING JOBSITE SPEED

Safety Data Sheet

Section 1 – Identification

Product Identifier:	Metal Fasteners (concrete anchors, powder actuated and gas fasteners) and Masonry Drill Bits
Manufacturer:	Ramset 700 High Grove Boulevard Glendale Heights, IL 60139
Information Telephone Number:	800-RAMSET6 or 630-825-7900
Information Email Address:	techsupport@itwccna.com
Recommended Use:	Fastening structural components to concrete and steel.
Restrictions on Use:	See conditions of use for specific applications at: www.ramset.com/ram_appl_guide.asp. Cutting or grinding of products may compromise performance and create physical hazards.

Note to User: Products described herein are considered "articles" per Title 29 of the U.S. Code of Federal Regulations Part 1910.1200. A safety data sheet (SDS) is not required for the products as such or in downstream use. This SDS is provided as a convenience to the user and was prepared per the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) format as adopted by the U.S. Occupational Safety and Health Administration.

Section 2 – Hazard(s) Identification

GHS Classification:	Non-hazardous
GHS Signal Word:	Not applicable
GHS Hazard Statements:	Not applicable
GHS Hazard Symbols:	Not applicable

Section 3 – Composition/Information on Ingredients

Products consist of metal base materials with various finishes and molded plastic components. Metal finishes include chrome and zinc plating as well as dyes used to provide color identification for certain products. Additional information regarding the metal finish on a particular product is available via techsupport@itwccna.com. Products are comprised of solid materials and component substances are not released in appreciable amounts during normal use.

Hazardous Component	CAS-No.	Weight %
None	---	---

Section 4 – First-aid Measures

Description of Necessary Measures: Information presented in this section relates to potential contact injuries from use of products with installation tools.

Eye Contact: Flush eyes with water for at least 15 minutes, obtain immediate medical attention.

Skin Contact: If skin is punctured, obtain immediate medical attention.

Inhalation: Not a relevant exposure pathway.

Ingestion: Not a relevant exposure pathway.

Most Important Symptoms/Effects: Acute effects are tissue injuries from significant, direct contact with the eyes or skin. Delayed effects are not expected with appropriate medical attention to acute effects.

Indication of Immediate Medical Attention & Special Treatment, if any: Obtain immediate medical attention for contact injuries.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media: Water spray, foam, carbon dioxide or dry chemical.

Specific Hazards: Thermal decomposition (combustion) may produce carbon monoxide, carbon dioxide, and complex hydrocarbons.

Special Protective Equipment & Precautions for Fire-fighters: Self-contained breathing apparatus in confined spaces.

Section 6 – Accidental Release Measures

Personal Precautions, Protective Equipment & Emergency Procedures: Not applicable for these solid products.

Methods & Materials for Containment & Cleanup: Not applicable for these solid products.

Section 7 – Handling and Storage

Precautions for Safe Handling: No special handling procedures required.

Conditions for Safe Storage, including Incompatibilities: Store in dry place to maintain product integrity.

Section 8 – Exposure Controls/Personal Protection

Exposure Limits: Not applicable for these solid products.

Engineering Controls: Ensure adequate air exchange when used with installation tools.

Individual Protection Measures: Wear safety glasses when used with installation tools.
Provide first-aid supplies for significant contact injuries.

Section 9 – Physical and Chemical Properties

Appearance:	Solid	**Upper/Lower Explosive Limits:**	Not applicable
Odor:	None	**Vapor Pressure:**	Not applicable
Odor Threshold:	Not applicable	**Vapor Density:**	Not applicable
pH:	Not applicable	**Relative Density (H_20=1):**	7.6 to 7.8
Melting Point/Freezing Point:	> 2500°F (metal)	**Solubility:**	Negligible
Initial Boiling Point/Range:	Not applicable	**Partition Coefficient (Oct/H_20):**	Negligible
Flash Point:	Not applicable	**Auto-Ignition Temperature:**	Not applicable
Evaporation Rate:	Not applicable	**Decomposition Temperature:**	approx. 300°F
Flammability:	Plastic will burn.	**Viscosity:**	Not applicable

Section 10 – Stability and Reactivity

Reactivity:	No significant reactivity
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	No significant possibility
Conditions to Avoid:	Extreme heat
Incompatible Materials:	Strong acids
Hazardous Decomposition Products:	Complex hydrocarbons at temperatures above 300 °F.

Section 11 – Toxicological Information

Toxicological Effects:	None expected from products as sold.
Likely Routes of Exposure:	Eye or skin contact when used with installation tools.
Symptoms Related to Physical, Chemical, and Toxicological Characteristics:	None expected from products as sold.
Delayed & Immediate Exposure Effects:	None expected from products as sold.
Chronic Exposure Effects:	None expected from products as sold.
Numerical Measures of Toxicity:	Not applicable
Carcinogenicity:	Not applicable

Section 12 – Ecological Information

Ecotoxicity:	None expected from these insoluble, solid products.
Persistence and degradability:	Products will persist with very limited degradability.
Bioaccumulative Potential:	Not applicable
Mobility in Soil:	Not applicable
Other Adverse Effects:	None identified

Section 13 – Disposal Considerations

Products are non-hazardous but unused products must be properly disposed of or recycled in accordance with all applicable federal, state, and local regulations.

Section 14 – Transport Information

Products are not regulated as a hazardous material or dangerous good in any mode of transportation.

UN Number:	Not applicable
UN Proper Shipping Name:	Not applicable
Transport Hazard Classes:	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable
Bulk Transportation Requirements:	Not applicable
Special Transportation Precautions:	Not applicable

Section 15 – Regulatory Information

There are no safety, health, and environmental regulations specific to these products.

Section 16 – Other Information

Hazardous Materials Identification System (HMIS) Ratings:

Health: 0
Flammability: 0
Physical Hazard: 0
Personal Protection: **See Note below.**

Hazard Ratings: Severe to Minimal (4 to 0)

Note: Personal Protection rating to be supplied by user depending on conditions of use. Wear safety glasses when using these products with installation tools.

Date Prepared: April 9, 2015
Prepared By: Ramset Product Safety Department

Disclaimer of Expressed and Implied Warranties

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the products, the safety of these products, or the hazards related to their use. This information and products are furnished on the condition that the person receiving them shall make his or her own determination as to the suitability of the products for his or her particular purpose and on the condition that he or she assumes the risk of his or her use thereof.

SAFETY DATA SHEET

Issue Date 13-Dec-2012 **Revision Date** 03-Mar-2023 **Version** 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Silicone Sealant – Acetoxy Cure – Clear, White & Colors

Other Means of Identification

SDS # RD-0081

Product Code 0810, 0816, 0826 Series

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Silicone Sealant.

Details of the Supplier of the Safety Data Sheet

Supplier Address
Red Devil, Inc.
4175 Webb Street
Pryor, Oklahoma 74361
www.reddevil.com

Emergency Telephone Number

Company Phone Number 918-825-5744
Fax: 918-825-5761

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2

Signal Word
Warning

Hazard Statements
Causes skin irritation

Appearance Clear/opaque or colored paste **Physical State** Paste **Odor** Acetic Acid Odor (Vinegar odor)

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water
If skin irritation persist: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Hazards Not Otherwise Classified (HNOC)
Not Applicable

Other Information
Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Hydroxy-terminated Dimethyl siloxane	70131-67-8	>50
Non-hazardous ingredients *	Proprietary	>10
Amorphous silica (glass)	7631-86-9	<13
Polydimethylsiloxane	63148-62-9	<10
Methyltriacetoxysilane	4253-34-3	<6
Titanium Dioxide	13463-67-7	<5
Ethyltriacetoxysilane	17689-77-9	<6

* Unlisted ingredients are not considered hazardous under the OSHA GHS Hazard Communication Standard (29 CFR 1910.1200). (Methyltriacetoxysilane) Observe limits for acetic acid formed during curing on exposure to water or humid air. (Silica, amorphous; Titanium Dioxide) Inhalation of particulates unlikely due to product's physical state

4. FIRST AID MEASURES

First Aid Measures

General advice Provide this SDS to medical personnel for treatment.

Inhalation If symptoms are experienced remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.

Eye Contact Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes while holding the eyelid(s) open. Obtain medical attention.

Ingestion Rinse mouth thoroughly with water. If irritation or discomfort occurs, obtain medical advice.

Skin Contact No health effects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advise.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms Causes skin irritation. May cause nose, throat & respiratory tract irritation. Direct contact with eyes may cause temporary irritation.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat according to person's condition & specifics of exposure.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire Use carbon dioxide (CO2), dry chemical or water spray.

Large Fire Use dry chemical, foam or water spray.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
Not determined.

Hazardous combustion products Carbon oxides & traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

Protective Equipment and Precautions for Firefighters
Self-contained breathing apparatus & protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Observe all personal protection equipment recommendations described in Sections 5 & 8.

Environmental Precautions See Section 12 for additional ecological information.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.

Methods for Cleaning Up Wipe up or scrape up & contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state & federal laws & regulations may apply to releases & disposal of this material as well as those materials & items employed in the cleanup of releases. You will need to determine which federal, state & local laws & regulations are applicable. Sections 13 & 15 of this MSDS provide information regarding certain federal & state requirements.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Use only in well-ventilated areas. Avoid contact with skin and eyes. Product evolves acetic acid (HOAc) when exposed to water or humid air.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container closed & store away from water or moisture.

Incompatible Materials Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form as described in Section 8.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines Exposure guidelines / protective equipment are for routine handling and accidental spills

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Amorphous silica (glass) 7631-86-9	-	(vacated) TWA: 6 mg/m³ <1% Crystalline silica TWA: 20 mppcf : (80)/(% SiO2) mg/m³ TWA	IDLH: 3000 mg/m³ TWA: 6 mg/m³
Titanium Dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust	IDLH: 5000 mg/m³

Other Information Acetic acid is formed upon contact w/ water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm & ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

Appropriate Engineering Controls

Engineering Controls Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Good general ventilation should be sufficient.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Safety glasses as a minimum for protection.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection No special equipment needed.

General Hygiene Considerations Note: These precautions are for room temperature handling. Use @ elevated temperature or aerosol/spray applications may require added precautions. Handle in accordance with good industrial hygiene and safety practice. Wash @ mealtime & end of shift. Contaminated clothing & shoes should be removed as soon as practical & thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	Paste		
Appearance	Clear/opaque or colored paste	**Odor**	Acetic Acid Odor (Vinegar odor)
Color	Various	**Odor threshold**	Not determined

Property	Values	Remarks • Method
pH	Not determined	
Melting point/freezing point	Not determined	
Boiling point/boiling range	Not determined	
Flash point	Not applicable	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not determined	
Flammability limits in air		

Upper flammability limits	Not determined	
Lower flammability limit	Not determined	
Vapor pressure	Not determined	
Vapor density	Not determined	
Specific gravity	~1.04	@ 25 °C (77 °F)
Water solubility	Not determined	
Solubility in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing Properties	Not determined	

Other Information

Additional information	Note: The above information is not intended for use in preparing product specifications
VOC Content (%)	< 3%/wt (< 40 g/L)

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to Avoid
Incompatible Materials.

Incompatible Materials
Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form as described in Section 8.

Hazardous Decomposition Products
Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides & traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde, Nitrogen oxides & metal oxides.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation	May cause irritation of respiratory tract.
Eye Contact	May cause temporary irritation on eye contact.
Skin Contact	Causes skin irritation. Can be absorbed through the skin.
Ingestion	Can be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Amorphous silica (glass) 7631-86-9	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.2 mg/L (Rat) 1 h
Polydimethylsiloxane 63148-62-9	> 17 g/kg (Rat)	> 2 g/kg (Rabbit)	-
Methyltriacetoxysilane 4253-34-3	= 2060 mg/kg (Rat)	-	-
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Titanium dioxide is a possible carcinogen when it appears as a respirable dust.

Chemical Name	ACGIH	IARC	NTP	OSHA
Amorphous silica (glass) 7631-86-9		Group 3		
Titanium Dioxide 13463-67-7		Group 2B		X

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical Measures of Toxicity- Product
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Amorphous silica (glass) 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static		7600: 48 h Ceriodaphnia dubia mg/L EC50

Persistence and Degradability
Complete information is not yet available.

Bioaccumulation
Complete information is not yet available.

Mobility
Complete information is not yet available.

Other Adverse Effects Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances
DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*
DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*
EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
ENCS *- Japan Existing and New Chemical Substances*
IECSC *- China Inventory of Existing Chemical Substances*
KECL *- Korean Existing and Evaluated Chemical Substances*
PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

US State Regulations

Chemical Name	California Proposition 65
Titanium Dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Amorphous silica (glass) 7631-86-9	X	X	X

Titanium Dioxide 13463-67-7	X	X	X

U.S. EPA Label Information

16. OTHER INFORMATION

NFPA	**Health Hazards** 1	**Flammability** 1	**Instability** 0	**Special Hazards** Not determined
HMIS	**Health Hazards** 1	**Flammability** 0	**Physical Hazards** 0	**Personal Protection** B- Safety Glasses, Gloves

Issue Date 13-Dec-2012
Revision Date 01-Oct-2017
Revision Note
New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: **SUN ULTRA 93N 10%ETHANOL**

Manufacturer Information:

Sunoco, Inc. (R&M)
1735 Market Street LL

Philadelphia, Pennsylvania, 19103-7583
sunocomsds@sunocoinc.com

Product Use:

Motor Fuel

Emergency Phone Numbers:

Chemtrec	(800) 424-9300	24 Hours
Sunoco Inc.	(800) 964-8861	24 Hours

SDS Information:

Product Safety Information	(888) 567-3066
Email	sunocomsds@sunocoinc.com

2. HAZARDS IDENTIFICATION

2.1 Classification

CLP Classification

Hazard Class/Category	Hazard Statement
Flammable Liquid 1	Extremely flammable liquid and vapor H224

Aspiration Toxicity 1	May be fatal if swallowed and enters airways H304
STOT (Single exposure) 3	May cause drowsiness or dizziness by inhalation H336
Skin Irritation 2	Causes skin irritation H315
Acute Tox Inh 4	Harmful if inhaled H332
STOT (Repeated exposure) 1	Causes damage to central nervous system, liver, kidney, cardiovascular and respiratory system through prolonged and repeated exposure H372*
Carcinogen 1A	May cause cancer H350
Reproductive Toxicity 2	Suspected of damaging fertility or the unborn child H361df
Aquatic Environment (Chronic) 2	Toxic to aquatic life with long lasting effects (H411).

2.2 Label Elements

Hazard Pictograms:

DANGER

Hazard Statements

Extremely flammable liquid and vapor (H224). May be fatal if swallowed and enters airways (H304).May cause drowsiness or dizziness by inhalation (H336). Causes damage to central nervous system, liver, kidney, cardiovascular and respiratory system through prolonged and repeated exposure (H372). Harmful if inhaled (H332).Causes skin irritation (H315) Suspected of damaging fertility or the unborn child (H361). May cause cancer (H350). Toxic to aquatic life with long lasting effects (H411).

Precautionary Statements

Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202) Keep away from heat/sparks/open flames/hot surfaces – No smoking (P210). Keep container tightly closed (P233). Ground/bond container and receiving equipment (P240). Use explosion-proof electrical/ventilating/light equipment (P241). Use only non-sparking tools (P242). Take precautionary measures against static discharge (P243). Avoid breathing mist, vapor, and spray (P261). Wash hands thoroughly after handling (P264). Do not eat, drink or smoke when using this product (P270). Use only outdoors or in a well-ventilated area (P271). Avoid release to the environment (P273). Wear protective gloves/protective clothing/eye protection/face protection (P280). Use personal protective equipment as required (P281).

IF SWALLOWED (P301): Immediately call a POISON CENTER or doctor/physician (P310). Do NOT induce vomiting (P331). IF ON SKIN (or hair) (P301): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P353). If skin irritation occurs (P332): Get medical attention (P313). Wash with plenty of soap and water (P352). IF INHALED (P304): Remove victim to fresh air and keep at rest in a position comfortable for breathing (P340). Call a POISON CENTER or doctor/physician if you feel unwell (P312). Take off contaminated clothing and wash before reuse (P362). In case of fire (P370): Use foam or dry powder for extinction (P378). Collect spillage (P391). Store in well-ventilated place (P403). Keep container tightly closed (P233). Store locked up (P405). Dispose of contents/container to authorized hazardous waste facility (P501).

Precautionary Statements			
Prevention	**Response**	**Storage**	**Disposal**
P2XX	P3XX	P4XX	P5XX

- **EMERGENCY OVERVIEW**
  Static accumulator. May form an ignitable vapor/air mixture. Vapors may cause flash fire or explosion.

Hazards Ratings:
Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	Health	Fire	Reactivity	PPI
NFPA	1	3	0	
HMIS	2	3	0	X

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount (Vol%)
LIGHT PETROLEUM DISTILLATE	8006-61-9	0 - 99.9
TOLUENE	108-88-3	0 - 30
XYLENE	1330-20-7	0 - 25
ETHYL ALCOHOL	64-17-5	0 - 10
CYCLOHEXANE	110-82-7	0 - 9
ETHYL BENZENE	100-41-4	0 - 5
N-HEXANE	110-54-3	0 - 5
NAPHTHALENE	91-20-3	0 - 5
1,2,4-TRIMETHYLBENZENE	95-63-6	0 - 5
BENZENE	71-43-2	0.1 - 4.9
BUTANE	106-97-8	0 - 3
CUMENE	98-82-8	0 - 1

4. FIRST AID MEASURES

- **INHALATION**
  Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and continue to monitor. Get immediate medical attention. NOTE TO PHYSICIAN: Catecholamines and similar adrenergic drugs are generally contraindicated because of potential for increased sensitivity of the heart from hydrocarbon overexposure and subsequent ventricular fibrillation. EKG monitoring may be indicated and bronchodilators should be selected with care.
- **SKIN**
  Immediately flush with large amounts of water for 20 minutes, use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. Get prompt medical attention. Injection injuries may not appear serious at first but within a few hours, without proper treatment, the area will become swollen, discolored and extremely painful. Wash clothing before reuse.
- **EYES**
  Flush eye with water for 20 minutes. Get medical attention.
- **INGESTION**
  If swallowed, immediately contact a physician or Poison Control Center. Never give anything by mouth to an intoxicated, unconscious or convulsing person. Get immediate medical attention. Do not induce vomiting!

5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA**
  The following media may be used to extinguish a fire involving this material: Water spray; Regular foam; Dry chemical; Carbon dioxide;

- **FIRE FIGHTING INSTRUCTIONS**
  Use water spray to cool fire exposed tanks and containers. Wear structural firefighting gear. The use of fresh air equipment such as Self Contained Breathing Apparatus (SCBA) or Supplied Air Respirators should be worn for fire fighting if exposure or potential exposure to products of combustion is expected.

FLAMMABLE PROPERTIES

	Typical	Minimum	Maximum	Text Result	Units	Method
Flash Point				MINUS 40 EST'D	F	N/A
Autoignition Temperature				536 ESTIMATED	F	N/A
Lower Explosion Limit	1.5				%	N/A
Upper Explosion Limit	7.6				%	N/A

6. ACCIDENTAL RELEASE MEASURES

Prevent ignition, stop leak and ventilate the area. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Do not use spark-generating metals for sweeping up spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Vapor can be controlled using a water fog. Water streams should not be directed to the liquid as this will cause the liquid to boil and generate more vapor. Keep personnel upwind from leak. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required.

7. HANDLING AND STORAGE

- **HANDLING**
  Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Use only in a well-ventilated area. STATIC ACCUMULATOR. This liquid may form an ignitable vapor-air mixture in closed tanks or containers. This liquid may accumulate static electricity even when transferred into properly grounded containers. Bonding and grounding may be insufficient to remove static electricity. Static electricity accumulation may be significantly increased by the presence of small quantities of water.Always bond receiving container to the fill pipe before and during loading, following NFPA-77 and/or API RP 2003 requirements. Automatic gauging devices and other floats in vessels or tanks which contain static accumulating liquids should be electrically bonded to the shell. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep the nozzle in contact with the container throughout the loading process. Do not fill any portable containers in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e. loading this material in tanks or shipping compartments that previously contained middle distillates or similar products). Non-equilibrium conditions may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigating efforts, including bonding and grounding. Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Never siphon by mouth. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioned, or properly disposed of. A static electrical discharge can accumulate when this material is flowing through pipes, nozzles or filters or when it is agitated. A static spark discharge can ignite accumulated vapors particularly during dry weather. Always bond receiving containers to the fill pipe before and during loading. Always keep nozzle in contact with the container throughout the loading process. Do not fill any portable container in or on the vehicle.
- **STORAGE**
  Keep away from heat, sparks, and flame. Keep container closed when not in use. Store in a cool dry place. Consult NFPA and / or OSHA codes for additional information. NFPA class IB storage. Flash point is less than 73 degrees F and boiling point is greater than or equal to 100 degrees F. Outside or detached storage is preferred.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult With a Health and Safety Professional for Specific Selections

Because benzene is present in this product above 0.1%, federal regulations require handling in a way so as to keep exposure below limits. Prolonged and repeated contact with benzene can result in fatal blood effects ranging from anemia to leukemia. Sun recommends the ACGIH exposure limit of 0.5 parts per million for 8-hours; 5.0 ppm for 15-minutes.

- **ENGINEERING CONTROLS**
  Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use with adequate ventilation. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- **PERSONAL PROTECTION**
  - **EYE PROTECTION**
    Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).
  - **GLOVES or HAND PROTECTION**
    The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Protective gloves are recommended to protect against contact with product. Nitrile (>8 hrs); Viton(8 hrs); Teflon (8 hrs)
  - **RESPIRATORY PROTECTION**
    Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Half-mask air purifying respirator with organic vapor cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with organic vapor cartridges is acceptable for exposures to fifty (50) times the exposure limit. Exposure should not exceed the cartridge limit of 1000 ppm. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-demand full-face supplied air respirator with escape bottle or SCBA. Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.
  - **OTHER**
    Where splashing is possible, full chemically resistant protective clothing and boots are required. The following materials are acceptable for use as protective clothing: Nitrile; Viton; Teflon; Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Remove contaminated clothing and wash before reuse. For non-fire emergencies, positive pressure SCBA and structural firefighter's protective clothing will provide only limited protection.

EXPOSURE GUIDELINES

	CAS No.	Governing Body	Exposure Limits		
BENZENE	71-43-2	ACGIH	STEL	2.5	ppm
BENZENE	71-43-2	OSHA	STEL	5	ppm
BENZENE	71-43-2	ACGIH	TWA	0.5	ppm
BENZENE	71-43-2	OSHA	TWA	1	ppm
BUTANE	106-97-8	ACGIH	TWA	1000	ppm
CUMENE	98-82-8	ACGIH	TWA	50	ppm
CUMENE	98-82-8	OSHA	TWA	50	ppm
CYCLOHEXANE	110-82-7	ACGIH	TWA	100	ppm
CYCLOHEXANE	110-82-7	OSHA	TWA	300	ppm
ETHYL ALCOHOL	64-17-5	ACGIH	TWA	1000	ppm
ETHYL ALCOHOL	64-17-5	OSHA	TWA	1000	ppm
ETHYL BENZENE	100-41-4	ACGIH	TWA	20	ppm
ETHYL BENZENE	100-41-4	OSHA	TWA	100	ppm
N-HEXANE	110-54-3	ACGIH	TWA	50	ppm
N-HEXANE	110-54-3	OSHA	TWA	500	ppm
NAPHTHALENE	91-20-3	ACGIH	STEL	15	ppm

NAPHTHALENE	91-20-3	ACGIH	TWA	10	ppm
NAPHTHALENE	91-20-3	OSHA	TWA	10	ppm
TOLUENE	108-88-3	NIOSH	STEL	150	ppm
TOLUENE	108-88-3	ACGIH	TWA	20	ppm
TOLUENE	108-88-3	OSHA	TWA	200	ppm
XYLENE	1330-20-7	ACGIH	STEL	150	ppm
XYLENE	1330-20-7	ACGIH	TWA	100	ppm
XYLENE	1330-20-7	OSHA	TWA	100	ppm
LIGHT PETROLEUM DISTILLATE	8006-61-9	ACGIH	STEL	500	ppm
LIGHT PETROLEUM DISTILLATE	8006-61-9	ACGIH	TWA	300	ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Property	Typical	Units	Method
Appearance	Clear Liquid	N/A	Unknown
Boiling Point (Initial)	100 38	F C	ASTM D 86
Boiling Range	100-400 38-204	F C	ASTM D 86
Liquid Conductivity	<50 varies	pS/m	Reference Value
Flash Point	- 40 Est. -40	F C	Reference Value
Melting Point	No Data	F	
pH	Not Applicable		
Octanol/Water Partition Coefficient	2-7	N/A	Reference Value
Lower Explosion Limit	1.5	%	Reference Value
Upper Explosion Limit	7.6	%	Reference Value
Specific Gravity	0.76	N/A	ASTM D 287
Solubility In Water	NIL TO 10%	wt %	Reference Value
Odor	Gasoline Odor.		Reference Value
Evapouration Rate	No data		
Decomposition temp	No data		
Odor Threshold Flammability	<1	ppm	Reference Value
Vapor Pressure	5 - 16	psia	Reference Value
Viscosity (F)	no data	SUS	ASTM D 5191
Viscosity (C)	no data	CsT	
% Volatile	100	wt %	Reference Value
Auto Ignition	536 Est. 280 Est.	F C	Reference Value

10. STABILITY AND REACTIVITY

- **STABILITY**
  Stable
- **CONDITIONS TO AVOID**
  Avoid heat, sparks and open flame. Avoid static discharge.
- **INCOMPATIBILITY**
  The following materials are incompatible with this product: Strong oxidizers, Alkaline materials, Acids, Chlorine, oncentrated oxygen; Halogens and halogenated compounds; Hydrogen peroxide;
- **HAZARDOUS DECOMPOSITION PRODUCTS**
  Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.
- **HAZARDOUS POLYMERIZATION**
  Will not polymerize.

11. TOXICOLOGY INFORMATION

- **POTENTIAL HEALTH EFFECTS**

  - **PRE-EXISTING MEDICAL CONDITIONS**
    The following diseases or disorders may be aggravated by exposure to this product: skin, eye, blood forming organs, nervous system, respiratory system, lung (asthma-like conditions), cardiovascular system, liver, kidney,

  - **Acute Toxicity:** Samples of gasoline and a number of low boiling point naphtha streams have been tested in acute oral, dermal and inhalation studies. Results indicate the following:
    - **Oral:** Rat oral LD_{50} > 5000 mg/kg bodyweight (ARCO, 1986b)
    - **Inhalation:** Rat inhalation LC_{50} > 5.2 mg/l (ARCO, 1992)
    - **Dermal:** Rabbit dermal LD_{50} > 2000 mg/kg bodyweight (ARCO, 1986a)

  - **Skin Corrosion / Irritation:** Samples of gasoline and a number of low boiling point naphtha streams have been tested in rabbit skin irritation studies. The majority of the data were derived using a 24 hour occluded exposure protocol. The degree of dermal irritation observed was variable, ranging from slight to moderate/severe, normally persisting for up to 14 days. There was no evidence of skin corrosion. Heavier, aromatic materials caused more irritation than lighter, paraffinic streams (API, 1995).

  - **Serious Eye Damage / Irritation:** The effects of gasoline and low boiling point naphtha streams on the eye have been investigated in rabbits using a number of samples. None of the samples tested showed more than minimal redness and swelling, which resolved quickly (ARCO, 1986d).

  - **Respiratory or Skin Sensitization:** Tests in guinea pigs with gasoline and a number of low boiling point naphtha streams showed no evidence of skin sensitization (ARCO, 1986c). There are no reports available to indicate that gasoline or low boiling point naphthas have the potential to cause respiratory sensitization.

  - **Germ Cell Mutagenicity:** The mutagenic potential of gasoline and low boiling point naphthas has been extensively studied in a range of *in vivo* and *in vitro* assays. The majority of the studies showed no evidence of mutagenic activity. Gasoline and low boiling point naphthas can contain benzene, a constituent that is classified as a germ cell mutagen (API, 1977; API, 2005).

  - **Carcinogenicity:** The carcinogenic potential of gasoline has been investigated in rats and mice following inhalation exposure for 2 years. In rats, there was an increased incidence of kidney tumours in males and in mice there was an increased incidence of liver tumours in females; further work has shown that these tumours are sex and species specific and are not considered relevant to humans (Short BG *et al.,* 1989). Results of 2 year skin painting studies with gasoline or low boiling point naphthas have shown either no, or weak potential (low incidence and long latent period) for the development of skin tumours. Additional work has shown that where tumours arise

they are most likely a result of a non-genotoxic response due to dermal irritation (API, 1983). Gasoline and low boiling point naphthas can contain benzene, a constituent that is classified as a human carcinogen.

- **Reproductive Toxicity:** Results of guideline developmental toxicity studies on gasolines and OECD developmental toxicity screening studies with low boiling point naphtha streams showed no evidence of developmental toxicity in rats (Roberts L et al, 2001). Similarly, studies in rats with gasoline did not show any effect on reproductive performance (McKee RH et al, 2000). Gasoline and low boiling point naphthas can contain amounts of toluene and/or n-hexane, constituents that are classified as reprotoxicants.

- **Specific Target Organ Toxicity (STOT)**

    - **Single Exposure:** Acute exposure studies show no evidence of systemic toxicity, other than a potential to cause narcosis / CNS depression at higher exposure concentrations (Drinker P et al, 1943; Davis A et al 1960).

    - **Repeated Exposure:** The repeat dose toxicity of gasoline and low boiling point naphthas has been studied in rats following dermal and inhalation exposure for periods between 10 days and up to 2 years. The effects of repeated inhalation exposure of primates to gasoline have also been studied. In dermal studies, no systemic toxicity has been seen; the only effect observed was moderate to severe dermal irritation. Repeated inhalation exposure causes _light hydrocarbon nephropathy' in male rats, an effect which is considered to be both sex and species specific. (Halder CA et al, 1985; API, 2005; ARCO, 1986e)

- **Aspiration:** Gasoline and low boiling point naphthas are low viscosity, mobile hydrocarbon liquids with a viscosity at 40°C of < 7 mm_2/s.

Additional Toxicology Information

Because **benzene** is present in this product above 0.1%, federal regulations require handling in a way so as to keep exposure below limits. Prolonged and repeated contact with benzene can result in fatal blood effects ranging from anemia to leukemia. Sun recommends the ACGIH exposure limit of 0.5 parts per million for 8-hours; 5.0 ppm for 15-minutes.

Component Toxicity Information

Cumene may be harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and cause damage. May cause respiratory irritation, fluid in the lungs and lung damage. May be irritating to the skin and eyes. May cause nervous system effects, including drowsiness, dizziness, coma and even death. Overexposure has caused kidney, nose, and liver damage in laboratory animals. Following inhalation exposure, an increased tumor incidence has been observed in experimental animals. The significance of this finding to human health is presently unknown. **Ethylbenzene**, a component of this product, has been designated by the International Agency for Research on Cancer as "possibly carcinogenic to humans", based on increased tumor incidence in laboratory animals. Overexposure may lead to nervous system effects, including drowsiness, dizziness, nausea, headaches, paralysis, loss of consciousness and even death. Repeated overexposure has caused a hearing loss in laboratory animals. Hours of exposure to high airborne concentrations of **toluene** and **xylene**, minor components of this product, has caused a hearing loss in laboratory animals. Most adverse health effects associated with **ethanol**, a component of this material, are related to the chronic ingestion of alcoholic beverages. Alcoholism has been associated with liver, stomach, heart, and nervous system damage, cancer, adverse reproductive effects, and effects on the developing fetus. Many of these effects may be related to metabolic changes that result from constantly high blood levels of alcohol. This exposure pattern is significantly different from that of persons handling industrial ethanol in the workplace or from refueling cars with gasoline containing ethanol.

12. ECOLOGICAL INFORMATION

Gasoline spills are toxic to fish and aquatic flora.

- **Acute (short-term) Aquatic Hazard:** Acute aquatic toxicity studies with fish, invertebrates and algae on samples of gasoline and low boiling point naphtha streams show acute toxicity values in the range 1-10 mg/l. These tests were carried out on water accommodated fractions, and in closed systems to prevent evaporative loss. (EBSI 1995a,b,c, CONCAWE, 1996, Petroleum Product Steward Council, 1995)

Chronic (long-term) Aquatic Hazard:

- **Chronic aquatic toxicity:** A chronic toxicity study in daphnia with an alkylate naphtha stream gave a NOELR of 2.6 mg/l (Springborn Laboratories, 1999).

Environmental fate (biodegradation / bioaccumulation): Substance is a hydrocarbon UVCB. Standard tests for biodegradation / bioaccumulation are intended for single substances and are not appropriate for complex substances. Based on compositional information available and measured or predicted data on key constituents, gasoline and gasoline naphthas are not expected to meet the criteria for ready degradability but are inherently biodegradable. Constituents of gasoline naphthas show measured or predicted values for log $K_{ow} \geq 3$ and are considered potentially bioaccumulative.

13. DISPOSAL CONSIDERATIONS

Follow federal, state and local regulations. This material is a RCRA hazardous waste. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

14. TRANSPORT INFORMATION

Governing Body	**DOT**
Mode	Ground
Proper Shipping Name	Ethanol and gasoline mixture
Hazard Class	3 (Flammable liquid)
Packing Group	II
UN/UN No.	UN 3475
Label	Flammable
Governing Body	**ARD/RID**
Mode	Ground
Proper Shipping Name	Ethanol and gasoline mixture
Hazard Class	3 (Flammable liquid)
Packing Group	II
UN/UN No.	UN 3475
Label	Flammable
Flashpoint	-40 F
Governing Body	**IMDG**
Mode	Vessel
Proper Shipping Name	Ethanol and gasoline mixture
Hazard Class	3 (Flammable liquid)
Packing Group	II
UN/UN No.	UN 3475
Label	Flammable
Flash point	-40 F cc

15. REGULATORY INFORMATION

This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): Maximum Wt%: Toulene- CAS Number 108-88-3, 35%; Xylene- CAS Number 1330-20-7. 29%; Cyclohexane- CAS Number 110-82-7, 9.5%; Ethyl benzene- CAS Number 100-41-4, 6%; N-Hexane- CAS Number 110-54-3, 4.5%; Naphthalene- CAS Number 91-20-3, 8%; 1,2,4-Trimethylbenzene- CAS Number 95-63-6, 6%; Benzene- CAS Number 71-43-2, 5.8%; Cumene- CAS Number 98-82-8, 1.2%. This information must be included in all MSDSs that are copied and distributed for this material.

Regulatory List	**Component**	**CAS No.**
ACGIH - Occupational Exposure Limits - Carcinogens	BENZENE	71-43-2
ACGIH - Occupational Exposure Limits - Carcinogens	ETHYL ALCOHOL	64-17-5
ACGIH - Occupational Exposure Limits - Carcinogens	ETHYL BENZENE	100-41-4
ACGIH - Occupational Exposure Limits - Carcinogens	NAPHTHALENE	91-20-3
ACGIH - Occupational Exposure Limits - Carcinogens	TOLUENE	108-88-3
ACGIH - Occupational Exposure Limits - Carcinogens	XYLENE	1330-20-7
ACGIH - Occupational Exposure Limits - TWAs	BENZENE	71-43-2
ACGIH - Occupational Exposure Limits - TWAs	BUTANE	106-97-8
ACGIH - Occupational Exposure Limits - TWAs	CUMENE	98-82-8

ACGIH - Occupational Exposure Limits - TWAs	CYCLOHEXANE	110-82-7
ACGIH - Occupational Exposure Limits - TWAs	ETHYL BENZENE	100-41-4
ACGIH - Occupational Exposure Limits - TWAs	N-HEXANE	110-54-3
ACGIH - Occupational Exposure Limits - TWAs	NAPHTHALENE	91-20-3
ACGIH - Occupational Exposure Limits - TWAs	TOLUENE	108-88-3
ACGIH - Occupational Exposure Limits - TWAs	XYLENE	1330-20-7
ACGIH - Short Term Exposure Limits	BENZENE	71-43-2
ACGIH - Short Term Exposure Limits	ETHYL ALCOHOL	64-17-5
ACGIH - Short Term Exposure Limits	ETHYL BENZENE	100-41-4
ACGIH - Short Term Exposure Limits	NAPHTHALENE	91-20-3
ACGIH - Short Term Exposure Limits	XYLENE	1330-20-7
ACGIH - Skin Absorption Designation	BENZENE	71-43-2
ACGIH - Skin Absorption Designation	N-HEXANE	110-54-3
ACGIH - Skin Absorption Designation	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	BENZENE	71-43-2
CAA (Clean Air Act) - HON Rule - Organic HAPs	CUMENE	98-82-8
CAA (Clean Air Act) - HON Rule - Organic HAPs	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - HON Rule - Organic HAPs	N-HEXANE	110-54-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	TOLUENE	108-88-3
CAA (Clean Air Act) - HON Rule - Organic HAPs	XYLENE	1330-20-7
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	BENZENE	71-43-2
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	CUMENE	98-82-8
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	CYCLOHEXANE	110-82-7
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	ETHYL BENZENE	100-41-4
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	N-HEXANE	110-54-3
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	NAPHTHALENE	91-20-3
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	TOLUENE	108-88-3
CAA (Clean Air Act) - HON Rule - SOCMI Chemicals	XYLENE	1330-20-7
CAA - 1990 Hazardous Air Pollutants	BENZENE	71-43-2
CAA - 1990 Hazardous Air Pollutants	CUMENE	98-82-8
CAA - 1990 Hazardous Air Pollutants	ETHYL BENZENE	100-41-4
CAA - 1990 Hazardous Air Pollutants	N-HEXANE	110-54-3
CAA - 1990 Hazardous Air Pollutants	NAPHTHALENE	91-20-3
CAA - 1990 Hazardous Air Pollutants	TOLUENE	108-88-3
CAA - 1990 Hazardous Air Pollutants	XYLENE	1330-20-7
California - Prop. 65 - Developmental Toxicity	BENZENE	71-43-2
California - Prop. 65 - Developmental Toxicity	ETHYL ALCOHOL	64-17-5
California - Prop. 65 - Developmental Toxicity	TOLUENE	108-88-3
California - Prop. 65 - Reproductive - Female	TOLUENE	108-88-3
California - Prop. 65 - Reproductive - Male	BENZENE	71-43-2
California - Proposition 65 - Carcinogens List	BENZENE	71-43-2
California - Proposition 65 - Carcinogens List	ETHYL BENZENE	100-41-4
California - Proposition 65 - Carcinogens List	NAPHTHALENE	91-20-3
Canada - WHMIS - Ingredient Disclosure	1,2,4-TRIMETHYLBENZENE	95-63-6
Canada - WHMIS - Ingredient Disclosure	BUTANE	106-97-8
Canada - WHMIS - Ingredient Disclosure	CYCLOHEXANE	110-82-7
Canada - WHMIS - Ingredient Disclosure	ETHYL ALCOHOL	64-17-5
Canada - WHMIS - Ingredient Disclosure	ETHYL BENZENE	100-41-4
Canada - WHMIS - Ingredient Disclosure	N-HEXANE	110-54-3
Canada - WHMIS - Ingredient Disclosure	TOLUENE	108-88-3
CERCLA/SARA - Haz Substances and their RQs	BENZENE	71-43-2
CERCLA/SARA - Haz Substances and their RQs	CUMENE	98-82-8
CERCLA/SARA - Haz Substances and their RQs	CYCLOHEXANE	110-82-7
CERCLA/SARA - Haz Substances and their RQs	ETHYL BENZENE	100-41-4
CERCLA/SARA - Haz Substances and their RQs	N-HEXANE	110-54-3
CERCLA/SARA - Haz Substances and their RQs	NAPHTHALENE	91-20-3
CERCLA/SARA - Haz Substances and their RQs	TOLUENE	108-88-3
CERCLA/SARA - Haz Substances and their RQs	XYLENE	1330-20-7
CERCLA/SARA - Section 313 - Emission Reporting	1,2,4-TRIMETHYLBENZENE	95-63-6
CERCLA/SARA - Section 313 - Emission Reporting	BENZENE	71-43-2
CERCLA/SARA - Section 313 - Emission Reporting	CUMENE	98-82-8

CERCLA/SARA - Section 313 - Emission Reporting	CYCLOHEXANE	110-82-7
CERCLA/SARA - Section 313 - Emission Reporting	ETHYL BENZENE	100-41-4
CERCLA/SARA - Section 313 - Emission Reporting	N-HEXANE	110-54-3
CERCLA/SARA - Section 313 - Emission Reporting	NAPHTHALENE	91-20-3
CERCLA/SARA - Section 313 - Emission Reporting	TOLUENE	108-88-3
CERCLA/SARA - Section 313 - Emission Reporting	XYLENE	1330-20-7
CWA (Clean Water Act) - Hazardous Substances	BENZENE	71-43-2
CWA (Clean Water Act) - Hazardous Substances	CYCLOHEXANE	110-82-7
CWA (Clean Water Act) - Hazardous Substances	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Hazardous Substances	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Hazardous Substances	TOLUENE	108-88-3
CWA (Clean Water Act) - Hazardous Substances	XYLENE	1330-20-7
CWA (Clean Water Act) - Priority Pollutants	BENZENE	71-43-2
CWA (Clean Water Act) - Priority Pollutants	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Priority Pollutants	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Priority Pollutants	TOLUENE	108-88-3
CWA (Clean Water Act) - Toxic Pollutants	BENZENE	71-43-2
CWA (Clean Water Act) - Toxic Pollutants	ETHYL BENZENE	100-41-4
CWA (Clean Water Act) - Toxic Pollutants	NAPHTHALENE	91-20-3
CWA (Clean Water Act) - Toxic Pollutants	TOLUENE	108-88-3
IARC - Group 1 (carcinogenic to humans)	BENZENE	71-43-2
IARC - Group 1 (carcinogenic to humans)	ETHYL ALCOHOL	64-17-5
IARC - Group 2B (Possibly carcinogenic to humans)	ETHYL BENZENE	100-41-4
IARC - Group 2B (Possibly carcinogenic to humans)	LIGHT PETROLEUM DISTILLATE	8006-61-9
IARC - Group 2B (Possibly carcinogenic to humans)	NAPHTHALENE	91-20-3
IARC - Group 3 (not classifiable)	TOLUENE	108-88-3
IARC - Group 3 (not classifiable)	XYLENE	1330-20-7
Inventory - Australia (AICS)	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - Australia (AICS)	BENZENE	71-43-2
Inventory - Australia (AICS)	BUTANE	106-97-8
Inventory - Australia (AICS)	CUMENE	98-82-8
Inventory - Australia (AICS)	CYCLOHEXANE	110-82-7
Inventory - Australia (AICS)	ETHYL ALCOHOL	64-17-5
Inventory - Australia (AICS)	ETHYL BENZENE	100-41-4
Inventory - Australia (AICS)	LIGHT PETROLEUM DISTILLATE	8006-61-9
Inventory - Australia (AICS)	N-HEXANE	110-54-3
Inventory - Australia (AICS)	NAPHTHALENE	91-20-3
Inventory - Australia (AICS)	TOLUENE	108-88-3
Inventory - Australia (AICS)	XYLENE	1330-20-7
Inventory - Canada - Domestic Substances List	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - Canada - Domestic Substances List	BENZENE	71-43-2
Inventory - Canada - Domestic Substances List	BUTANE	106-97-8
Inventory - Canada - Domestic Substances List	CUMENE	98-82-8
Inventory - Canada - Domestic Substances List	CYCLOHEXANE	110-82-7
Inventory - Canada - Domestic Substances List	ETHYL ALCOHOL	64-17-5
Inventory - Canada - Domestic Substances List	ETHYL BENZENE	100-41-4
Inventory - Canada - Domestic Substances List	LIGHT PETROLEUM DISTILLATE	8006-61-9
Inventory - Canada - Domestic Substances List	N-HEXANE	110-54-3
Inventory - Canada - Domestic Substances List	NAPHTHALENE	91-20-3
Inventory - Canada - Domestic Substances List	TOLUENE	108-88-3
Inventory - Canada - Domestic Substances List	XYLENE	1330-20-7
Inventory - China	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - China	BENZENE	71-43-2
Inventory - China	BUTANE	106-97-8
Inventory - China	CUMENE	98-82-8
Inventory - China	CYCLOHEXANE	110-82-7
Inventory - China	ETHYL ALCOHOL	64-17-5
Inventory - China	ETHYL BENZENE	100-41-4
Inventory - China	LIGHT PETROLEUM	8006-61-9

	DISTILLATE	
Inventory - China	N-HEXANE	110-54-3
Inventory - China	NAPHTHALENE	91-20-3
Inventory - China	TOLUENE	108-88-3
Inventory - China	XYLENE	1330-20-7
Inventory - European EINECS Inventory	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - European EINECS Inventory	BENZENE	71-43-2
Inventory - European EINECS Inventory	BUTANE	106-97-8
Inventory - European EINECS Inventory	CUMENE	98-82-8
Inventory - European EINECS Inventory	CYCLOHEXANE	110-82-7
Inventory - European EINECS Inventory	ETHYL ALCOHOL	64-17-5
Inventory - European EINECS Inventory	ETHYL BENZENE	100-41-4
Inventory - European EINECS Inventory	LIGHT PETROLEUM DISTILLATE	8006-61-9
Inventory - European EINECS Inventory	N-HEXANE	110-54-3
Inventory - European EINECS Inventory	NAPHTHALENE	91-20-3
Inventory - European EINECS Inventory	TOLUENE	108-88-3
Inventory - European EINECS Inventory	XYLENE	1330-20-7
Inventory - Japan - (ENCS)	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - Japan - (ENCS)	BENZENE	71-43-2
Inventory - Japan - (ENCS)	BUTANE	106-97-8
Inventory - Japan - (ENCS)	CUMENE	98-82-8
Inventory - Japan - (ENCS)	CYCLOHEXANE	110-82-7
Inventory - Japan - (ENCS)	ETHYL ALCOHOL	64-17-5
Inventory - Japan - (ENCS)	ETHYL BENZENE	100-41-4
Inventory - Japan - (ENCS)	N-HEXANE	110-54-3
Inventory - Japan - (ENCS)	NAPHTHALENE	91-20-3
Inventory - Japan - (ENCS)	TOLUENE	108-88-3
Inventory - Japan - (ENCS)	XYLENE	1330-20-7
Inventory - Korea - Existing and Evaluated	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - Korea - Existing and Evaluated	BENZENE	71-43-2
Inventory - Korea - Existing and Evaluated	BUTANE	106-97-8
Inventory - Korea - Existing and Evaluated	CUMENE	98-82-8
Inventory - Korea - Existing and Evaluated	CYCLOHEXANE	110-82-7
Inventory - Korea - Existing and Evaluated	ETHYL ALCOHOL	64-17-5
Inventory - Korea - Existing and Evaluated	ETHYL BENZENE	100-41-4
Inventory - Korea - Existing and Evaluated	LIGHT PETROLEUM DISTILLATE	8006-61-9
Inventory - Korea - Existing and Evaluated	N-HEXANE	110-54-3
Inventory - Korea - Existing and Evaluated	NAPHTHALENE	91-20-3
Inventory - Korea - Existing and Evaluated	TOLUENE	108-88-3
Inventory - Korea - Existing and Evaluated	XYLENE	1330-20-7
Inventory - Philippines Inventory (PICCS)	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - Philippines Inventory (PICCS)	BENZENE	71-43-2
Inventory - Philippines Inventory (PICCS)	BUTANE	106-97-8
Inventory - Philippines Inventory (PICCS)	CUMENE	98-82-8
Inventory - Philippines Inventory (PICCS)	CYCLOHEXANE	110-82-7
Inventory - Philippines Inventory (PICCS)	ETHYL ALCOHOL	64-17-5
Inventory - Philippines Inventory (PICCS)	ETHYL BENZENE	100-41-4
Inventory - Philippines Inventory (PICCS)	LIGHT PETROLEUM DISTILLATE	8006-61-9
Inventory - Philippines Inventory (PICCS)	N-HEXANE	110-54-3
Inventory - Philippines Inventory (PICCS)	NAPHTHALENE	91-20-3
Inventory - Philippines Inventory (PICCS)	TOLUENE	108-88-3
Inventory - Philippines Inventory (PICCS)	XYLENE	1330-20-7
Inventory - TSCA - Sect. 8(b) Inventory	1,2,4-TRIMETHYLBENZENE	95-63-6
Inventory - TSCA - Sect. 8(b) Inventory	BENZENE	71-43-2
Inventory - TSCA - Sect. 8(b) Inventory	BUTANE	106-97-8
Inventory - TSCA - Sect. 8(b) Inventory	CUMENE	98-82-8
Inventory - TSCA - Sect. 8(b) Inventory	CYCLOHEXANE	110-82-7
Inventory - TSCA - Sect. 8(b) Inventory	ETHYL ALCOHOL	64-17-5
Inventory - TSCA - Sect. 8(b) Inventory	ETHYL BENZENE	100-41-4

Inventory - TSCA - Sect. 8(b) Inventory	LIGHT PETROLEUM DISTILLATE	8006-61-9
Inventory - TSCA - Sect. 8(b) Inventory	N-HEXANE	110-54-3
Inventory - TSCA - Sect. 8(b) Inventory	NAPHTHALENE	91-20-3
Inventory - TSCA - Sect. 8(b) Inventory	TOLUENE	108-88-3
Inventory - TSCA - Sect. 8(b) Inventory	XYLENE	1330-20-7
Massachusetts - Right To Know List	1,2,4-TRIMETHYLBENZENE	95-63-6
Massachusetts - Right To Know List	BENZENE	71-43-2
Massachusetts - Right To Know List	BUTANE	106-97-8
Massachusetts - Right To Know List	CUMENE	98-82-8
Massachusetts - Right To Know List	CYCLOHEXANE	110-82-7
Massachusetts - Right To Know List	ETHYL ALCOHOL	64-17-5
Massachusetts - Right To Know List	ETHYL BENZENE	100-41-4
Massachusetts - Right To Know List	LIGHT PETROLEUM DISTILLATE	8006-61-9
Massachusetts - Right To Know List	N-HEXANE	110-54-3
Massachusetts - Right To Know List	NAPHTHALENE	91-20-3
Massachusetts - Right To Know List	TOLUENE	108-88-3
Massachusetts - Right To Know List	XYLENE	1330-20-7
New Jersey - Department of Health RTK List	1,2,4-TRIMETHYLBENZENE	95-63-6
New Jersey - Department of Health RTK List	BENZENE	71-43-2
New Jersey - Department of Health RTK List	BUTANE	106-97-8
New Jersey - Department of Health RTK List	CUMENE	98-82-8
New Jersey - Department of Health RTK List	CYCLOHEXANE	110-82-7
New Jersey - Department of Health RTK List	ETHYL ALCOHOL	64-17-5
New Jersey - Department of Health RTK List	ETHYL BENZENE	100-41-4
New Jersey - Department of Health RTK List	LIGHT PETROLEUM DISTILLATE	8006-61-9
New Jersey - Department of Health RTK List	N-HEXANE	110-54-3
New Jersey - Department of Health RTK List	NAPHTHALENE	91-20-3
New Jersey - Department of Health RTK List	TOLUENE	108-88-3
New Jersey - Department of Health RTK List	XYLENE	1330-20-7
New Jersey - Env Hazardous Substances List	1,2,4-TRIMETHYLBENZENE	95-63-6
New Jersey - Env Hazardous Substances List	BENZENE	71-43-2
New Jersey - Env Hazardous Substances List	BUTANE	106-97-8
New Jersey - Env Hazardous Substances List	CUMENE	98-82-8
New Jersey - Env Hazardous Substances List	CYCLOHEXANE	110-82-7
New Jersey - Env Hazardous Substances List	ETHYL BENZENE	100-41-4
New Jersey - Env Hazardous Substances List	LIGHT PETROLEUM DISTILLATE	8006-61-9
New Jersey - Env Hazardous Substances List	N-HEXANE	110-54-3
New Jersey - Env Hazardous Substances List	NAPHTHALENE	91-20-3
New Jersey - Env Hazardous Substances List	TOLUENE	108-88-3
New Jersey - Env Hazardous Substances List	XYLENE	1330-20-7
New Jersey - Special Hazardous Substances	BENZENE	71-43-2
New Jersey - Special Hazardous Substances	BUTANE	106-97-8
New Jersey - Special Hazardous Substances	CUMENE	98-82-8
New Jersey - Special Hazardous Substances	CYCLOHEXANE	110-82-7
New Jersey - Special Hazardous Substances	ETHYL ALCOHOL	64-17-5
New Jersey - Special Hazardous Substances	ETHYL BENZENE	100-41-4
New Jersey - Special Hazardous Substances	LIGHT PETROLEUM DISTILLATE	8006-61-9
New Jersey - Special Hazardous Substances	N-HEXANE	110-54-3
New Jersey - Special Hazardous Substances	NAPHTHALENE	91-20-3
New Jersey - Special Hazardous Substances	TOLUENE	108-88-3
New Jersey - Special Hazardous Substances	XYLENE	1330-20-7
NTP - Report on Carcinogens - Known Carcinogens	BENZENE	71-43-2
NTP - Report on Carcinogens - Suspect Carcinogens	NAPHTHALENE	91-20-3
OSHA - Final PELs - Ceiling Limits	BENZENE	71-43-2
OSHA - Final PELs - Ceiling Limits	TOLUENE	108-88-3
OSHA - Final PELs - Short Term Exposure Limits	BENZENE	71-43-2
OSHA - Final PELs - Skin Notations	CUMENE	98-82-8

OSHA - Final PELs - Time Weighted Averages	BENZENE	71-43-2
OSHA - Final PELs - Time Weighted Averages	CUMENE	98-82-8
OSHA - Final PELs - Time Weighted Averages	CYCLOHEXANE	110-82-7
OSHA - Final PELs - Time Weighted Averages	ETHYL ALCOHOL	64-17-5
OSHA - Final PELs - Time Weighted Averages	ETHYL BENZENE	100-41-4
OSHA - Final PELs - Time Weighted Averages	N-HEXANE	110-54-3
OSHA - Final PELs - Time Weighted Averages	NAPHTHALENE	91-20-3
OSHA - Final PELs - Time Weighted Averages	TOLUENE	108-88-3
OSHA - Final PELs - Time Weighted Averages	XYLENE	1330-20-7
Pennsylvania - RTK (Right to Know) List	1,2,4-TRIMETHYLBENZENE	95-63-6
Pennsylvania - RTK (Right to Know) List	BENZENE	71-43-2
Pennsylvania - RTK (Right to Know) List	BUTANE	106-97-8
Pennsylvania - RTK (Right to Know) List	CUMENE	98-82-8
Pennsylvania - RTK (Right to Know) List	CYCLOHEXANE	110-82-7
Pennsylvania - RTK (Right to Know) List	ETHYL ALCOHOL	64-17-5
Pennsylvania - RTK (Right to Know) List	ETHYL BENZENE	100-41-4
Pennsylvania - RTK (Right to Know) List	N-HEXANE	110-54-3
Pennsylvania - RTK (Right to Know) List	NAPHTHALENE	91-20-3
Pennsylvania - RTK (Right to Know) List	TOLUENE	108-88-3
Pennsylvania - RTK (Right to Know) List	XYLENE	1330-20-7
Pennsylvania - RTK - Special Hazardous Substances	BENZENE	71-43-2
TSCA - Sect. 12(b) - Export Notification	NAPHTHALENE	91-20-3
TSCA - Section 4 - Chemical Test Rules	CYCLOHEXANE	110-82-7
TSCA - Section 4 - Chemical Test Rules	NAPHTHALENE	91-20-3

Title III Classifications Sections 311,312:

- Acute: **YES**
- Chronic: **YES**
- Fire: **YES**
- Reactivity: **NO**
- Sudden Release of Pressure: **NO**

16. OTHER INFORMATION

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Keep out of reach of children. For use as motor fuel only. Do not use for any other purpose.

REFERENCES (Section 11 and 12):

API (1977) Mutagenicity evaluation of unleaded gasoline. Study conducted by Litton Bionetics. API Med. Res. Publ. 28-30173. Washington DC: American Petroleum Institute
API (1983) Carcinogenic potential of key petroleum products. Study conducted by Eppley Institute for Research in Cancer, University of Nebraska Medical School. API Med. Res. Publ. 30-31646. Washington DC: American Petroleum Institute

API (1995) Primary skin irritation study in rabbits of API 91-01 and PS-6. Unleaded test gasolines. Study conducted by Hill Top Biolabs Inc. API Toxicology Report No. 409. Washington DC: American Petroleum Institute

API (2005) Baseline gasoline vapor condensate: a 13-week whole-body inhalation toxicity study in rats with neurotoxicity assessments and 4-week *in vivo* genotoxicity and immunotoxicity assessments. Study conducted by Huntingdon Life Sciences. Study No. 00-6125. Washington DC: American Petroleum Institute

ARCO (1986a) Acute dermal toxicity study in rabbits administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60553. Los Angeles CA: ARCO

ARCO (1986b) Acute oral toxicity study in rats administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60598. Los Angeles CA: ARCO

ARCO (1986c) Dermal sensitization study in guinea pigs administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60613. Los Angeles CA: ARCO

ARCO (1986d) Primary eye irritation study in rabbits administered test article F-64-01 unleaded Watson premium gasoline. UBTL Study No. 60583. Los Angeles CA: ARCO

ARCO (1986e) Twenty-eight (28) day dermal toxicity study in rats on test article F-64-01 unleaded Watson premium gasoline. UBTL Study No. 60761. Los Angeles CA: ARCO

ARCO (1992) Acute inhalation toxicity study (limit test) in rats administered test article F-101. UBTL Study No. 65798. Los Angeles CA: ARCO

CONCAWE (1996) Acute aquatic toxicity of gasolines. Report No. 96/57. Brussels: CONCAWE
Davis, A. et al (1960) The effects on human volunteers of exposure to air containing gasoline vapor. *Arch Environ Health 1, 548-554*

Drinker, P. et al (1943) The threshold toxicity of gasoline vapor. *J Ind Hyg Toxicol 25, 6, 225-232*

EBSI (1995a) Alga, growth inhibition test. MRD-95-048 gasoline W94/813, blend. Study performed for CONCAWE. EBSI Study No. 104867. East Millstone NJ: Exxon Biomedical Sciences Inc.

EBSI (1995b) Daphnia, acute toxicity test. MRD-95-044 gasoline W94/809, medium naphtha. Study performed for CONCAWE. EBSI Study No. 104442. East Millstone NJ: Exxon Biomedical Sciences Inc.

EBSI (1995c) Fish, acute toxicity test - rainbow trout. MRD-95-045 gasoline W94/810, isomerate. Study performed for CONCAWE. EBSI Study No. 104558. East Millstone NJ: Exxon Biomedical Sciences Inc.

Halder, C.A. et al (1985) Hydrocarbon nephropathy in male rats: identification of the nephrotoxic components of unleaded gasoline. *Toxicol Ind Health 1, 3, 67-87*

McKee, R.H. et al (2000) Assessment in rats of the reproductive toxicity of gasoline from a gasoline vapor recovery unit. *Reprod Toxicol 14, 4, 337-353*

Petroleum Product Stewardship Council (1995) Static-renewal 96-hour acute toxicity study of the water accommodated fraction (WAF) of whole light alkylate product to fathead minnow. Study conducted by Stonybrook Laboratories Inc. Study No. 65908. Washington DC: Petroleum Product Stewardship Council

Roberts, L. et al (2001) Developmental toxicity evaluation of unleaded gasoline vapor in the rat. *Reprod Toxicol 15, 5, 487-494*
Short, B.G. et al (1989) Promoting effects of unleaded gasoline and 2,2,4-trimethylpentane on the development of atypical cell foci and renal tubular cell tumors in rats exposed to *N*-ethyl-*N*-hydroxy-ethylnitrosamine. *Cancer Research 49, 22, 6369-6378*

Springborn Laboratories (1999) Light alkylate naphtha - full life cycle toxicity test with water fleas, *Daphnia magna*, under static-renewal conditions following OECD Guideline 211. Study No. 13687.0598.6105.130. Wareham MA: Springborn Laboratories Inc.

SAFETY DATA SHEET

1. Identification

Product identifier **DUROCK® Cement Board (with or without EdgeGuard™)**

Other means of identification

SDS number 14000010001

Synonyms Cement Underlayment Board, Cement Panels

Recommended use Interior or exterior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Sensitization, skin	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response If exposed or concerned: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Portland cement	65997-15-1	< 50
Fly ash	68131-74-8	< 20
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	< 10
Perlite	93763-70-3	< 10
Continuous filament glass fiber	65997-17-3	< 5

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 0.7

Composition comments

Occupational Exposure Limits for impurities are listed in Section 8. All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.7%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in eyes: Flush with cold tap water for at least 15 minutes. If irritation persists, seek medical attention immediately.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

May cause chemical eye burns. Permanent eye damage including blindness could result. Dust may cause skin, eye, throat and respiratory system irritation and cause coughing.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wash hands after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store all DUROCK© Panels flat. Store in an enclosed materials shelter providing protection from damage and exposure to the elements.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Components	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Portland cement (CAS 65997-15-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Portland cement (CAS 65997-15-1)	TWA	50 mppcf	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm3	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Portland cement (CAS 65997-15-1)	TWA	1 mg/m3	Respirable fraction.
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm3	Respirable fibers (≤ 3.5 µm in diameter & ≥ 10 µm in length)
		3 fibers/cm3	Fibrous dust.
		5 mg/m3	Fiber, total
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Portland cement (CAS 65997-15-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Board.

Color Gray.

Odor Low to no odor.

Odor threshold Not applicable.

pH 12

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	0.8 - 1.2 (H2O=1)
Solubility(ies)	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	60 - 65 lb/ft³
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Calcium oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Dust can be irritating to skin.
Eye contact	Causes serious eye damage.
Ingestion	Ingestion may cause irritation and stomach discomfort.
Symptoms related to the physical, chemical and toxicological characteristics	May cause chemical eye burns. Permanent eye damage or blindness could result. Dust may irritate eyes, skin, throat and upper respiratory system and cause coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Causes skin irritation. Dust can cause skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	
Respiratory sensitization	Not a sensitizer.
Skin sensitization	Trace amounts of Cr(VI) compounds from Portland Cement may cause allergic skin reaction even after one exposure.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7) Cancer

Reproductive toxicity Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Not classified. For detailed information, see section 16.

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Chronic effects Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

Components		Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7) Cancer

lung effects
immune system effects
kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

US. Rhode Island RTK

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)
Portland cement (CAS 65997-15-1)
Triethanolamine (CAS 102-71-6)

California Proposition 65

WARNING: This product can expose you to chemicals including Crystalline silica (Quartz), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (Quartz) (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No - Exempt

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-March-2014

Revision date 10-March-2023

Version # 03

Further information

Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:
Health: 2
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **RED TOP® Gauging Plaster - Perlite Aggregate**

Other means of identification

SDS number 53000010008

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 90
Perlite	93763-70-3	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

Most important symptoms/effects, acute and delayed Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.

Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear approved safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Color	White to off-white.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	6 - 8
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.4 - 2.8 (H2O=1)
Solubility(ies)	
Solubility (water)	0.15-0.40 g/100g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	45 - 55 lb/ft³ (dry)
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

Conditions to avoid	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
Incompatible materials	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat.
Hazardous decomposition products	Calcium oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Ingestion may cause irritation and stomach discomfort.
Inhalation	Airborne dust may irritate throat and upper respiratory system causing coughing.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Not a skin irritant.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not expected to cause respiratory sensitization based on non-skin sensitization history.
Skin sensitization	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
Germ cell mutagenicity	No evidence of mutagenicty found in Ames bacterial tests.
Carcinogenicity	This material is not classified as a carcinogen by IARC, ACGIH, NTP or OSHA.
Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	No data available, but none expected.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	No other specific acute or chronic health impact noted.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
Aquatic		
Fish	LC50 Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability	Calcium sulfate dissolves in water forming calcium and sulfate ions.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	No data available.
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200 (OSHA) and 8 CCR § 5194 (Cal/OSHA).

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. New Jersey Worker and Community Right-to-Know Act

Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 03-February-2014

Revision date -

Version # 01

Further information Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings

Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **RED TOP® Gauging Plaster - Slow Set**

Other means of identification

SDS number 53000010010

Synonyms Construction Plaster.

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Carcinogenicity	Category 1A
Specific target organ toxicity, repeated exposure	Category 2 (Lung)

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 90

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 2

Composition comments

All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 2%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

Most important symptoms/effects, acute and delayed

Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dust and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Impurities	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Color	White to off-white.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	6 - 8
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.4 - 2.8 (H2O=1)
Solubility(ies)	
Solubility (water)	0.15-0.40 g/100g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	45 - 55 lb/ft³ (dry)
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

Conditions to avoid	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
Incompatible materials	Acids. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
Hazardous decomposition products	Calcium oxides. Sulfur oxides. Silicon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer

Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours

Persistence and degradability Calcium sulfate dissolves in water forming calcium and sulfate ions.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects

Toxic Substances Control Act (TSCA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. New Jersey Worker and Community Right-to-Know Act

Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Rhode Island RTK

Crystalline silica (Quartz) (CAS 14808-60-7)

California Proposition 65

WARNING: This product can expose you to Crystalline silica (Quartz), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (Quartz) (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 17-September-2014

Revision date 20-May-2019

Version # 02

Further information Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **STRUCTO-LITE® Basecoat Plaster**

Other means of identification

SDS number 53000010015

Synonyms Construction Plaster.

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Carcinogenicity	Category 1A
Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (Lung)

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May cause cancer. May cause damage to organs (Lung) through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	< 85
Perlite	93763-70-3	< 10

Calcium sulfate	7778-18-9	< 5
Dolomite	16389-88-1	< 5

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 2

Composition comments

All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 2%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact

Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

Most important symptoms/effects, acute and delayed

Dust may irritate throat and respiratory system and cause coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

General information

Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not applicable.

Specific hazards arising from the chemical

Not a fire hazard.

Special protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods

Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Avoid inhalation of dust and contact with skin and eyes. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

Environmental precautions

Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling

Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

Conditions for safe storage, including any incompatibilities Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Impurities	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate (CAS 7778-18-9)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Dolomite (CAS 16389-88-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate (CAS 7778-18-9)	TWA	10 mg/m3	Inhalable fraction.
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate (CAS 7778-18-9)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Powder.

Color White to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 6 - 8

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.4 - 2.8 (H2O=1)
Solubility(ies)	
Solubility (water)	0.15-0.40 g/100g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	45 - 55 lb/ft³ (dry)
VOC	0 %

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
Incompatible materials	Acids. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
Hazardous decomposition products	Calcium oxides. Sulfur oxides. Silicon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Calcium sulfate (CAS 7778-18-9)		
Acute		
Inhalation		
LC50	Rat	> 3.26 mg/l, 4 Hours
Oral		
LD50	Rat	> 1581 mg/kg

Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.

Germ cell mutagenicity Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7) Cancer

Reproductive toxicity Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure No data available, but none expected.

Specific target organ toxicity - repeated exposure May damage lung tissue through repeated and prolonged exposure to high levels of respirable crystalline silica particles.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability Calcium sulfate dissolves in water forming calcium and sulfate ions.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Carcinogenicity Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate (CAS 7778-18-9)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate (CAS 7778-18-9)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate (CAS 7778-18-9)
Crystalline silica (Quartz) (CAS 14808-60-7)
Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Rhode Island RTK

Crystalline silica (Quartz) (CAS 14808-60-7)
Dolomite (CAS 16389-88-1)

California Proposition 65

WARNING: This product can expose you to Crystalline silica (Quartz), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (Quartz) (CAS 14808-60-7)	Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Crystalline silica (Quartz) (CAS 14808-60-7)
Dolomite (CAS 16389-88-1)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 29-January-2014

Revision date 31-March-2023

Version # 03

Further information Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA ratings

Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **STRUCTO-BASE® Gypsum Plaster**

Other means of identification

SDS number 53000010023

Synonyms Construction Plaster

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1)	26499-65-0	> 95

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	< 0.25

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.25%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this product is not expected to be a health risk. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Minimize dust production when mixing, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Impurities	**Type**	**Value**	**Form**
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Impurities	**Type**	**Value**	**Form**
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Powder.

Color White to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 6 - 8

Melting point/freezing point Not applicable.
Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.4 - 2.8 (H2O=1)
Solubility(ies)	
Solubility (water)	0.15 - 0.4 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	45 - 55 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
Incompatible materials	Acids. Exposure to water and acids must be supervised because the reactions are vigorous and produce large amounts of heat. Crystalline silica in contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires. Crystalline silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.
Hazardous decomposition products	Calcium oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed.
Inhalation	Inhalation of dusts may cause severe respiratory tract irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.

Reproductive toxicity	Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	Not classified. For detailed information, see section 16.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability	Calcium sulfate dissolves in water forming calcium and sulfate ions.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	No data available.
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations WARNING: This product contains chemical(s) known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. New Jersey Worker and Community Right-to-Know Act
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Pennsylvania Worker and Community Right-to-Know Law
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium Sulfate Hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance
Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 18-April-2014

Revision date -

Version # 01

Further information Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand Gypsum Panels**

Other means of identification

SDS number 54000000001

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Paper faced with gypsum core.

Physical state Solid.

Form Panel.

Color Gray to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH	6 - 8
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	
Solubility (water)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	41 - 58 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity	Low hazard.

Skin corrosion/irritation Gypsum was not found to be a skin irritant.

Serious eye damage/eye irritation Gypsum does not cause serious eye damage or irritation.

Respiratory or skin sensitization

Respiratory sensitization No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.

Skin sensitization Not a skin sensitizer (2).

Germ cell mutagenicity No evidence of mutagenic potential exists (3,4,5).

Carcinogenicity No evidence of carcinogenic potential exists (6).

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity No evidence of reproductive toxicity exists (2).

Specific target organ toxicity - single exposure Not toxic to lung tissue.

Specific target organ toxicity - repeated exposure Not toxic to lung tissue (6).

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Further information Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours

Persistence and degradability Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 18-November-2013

Revision date 24-March-2017

Version # 03

Further information

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

List of abbreviations

NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier SHEETROCK® Brand FIRECODE® Core Gypsum Panels

Other means of identification

SDS number 54000002001

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5
Kaolin	1332-58-7	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains varying levels of respirable crystalline silica, averaging up to 2.0 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Paper faced with gypsum core.

Physical state Solid.

Form Panel.

Color Gray to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 6 - 8

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	42 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity Low hazard.

Components	Species	Test Results
Kaolin (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Oral		
LD50	Rat	> 5000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Gypsum was not found to be a skin irritant.

Serious eye damage/eye irritation Gypsum does not cause serious eye damage or irritation.

Respiratory sensitization No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.

Skin sensitization Not a skin sensitizer (2).

Germ cell mutagenicity No evidence of mutagenic potential exists (3,4,5).

Carcinogenicity No evidence of carcinogenic potential exists (6).

Reproductive toxicity No evidence of reproductive toxicity exists (2).

Specific target organ toxicity - single exposure Not toxic to lung tissue.

Specific target organ toxicity - repeated exposure Not toxic to lung tissue (6).

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Further information Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity The product contains a substance which is very toxic to aquatic organisms.

Components		Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.
Food and Drug Administration (FDA)	Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)
Kaolin (CAS 1332-58-7)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)
Kaolin (CAS 1332-58-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	17-December-2013
Revision date	20-July-2023
Version #	03
Further information	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings

List of abbreviations

NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand AR Gypsum Panels FIRECODE® Core**

Other means of identification

SDS number 54000002006

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Paper faced with gypsum core.

Physical state Solid.

Form Panel.

Color Gray to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 6 - 8

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	46 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity	Low hazard.
Skin corrosion/irritation	Gypsum was not found to be a skin irritant.
Serious eye damage/eye irritation	Gypsum does not cause serious eye damage or irritation.
Respiratory sensitization	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer (2).
Germ cell mutagenicity	No evidence of mutagenic potential exists (3,4,5).
Carcinogenicity	No evidence of carcinogenic potential exists (6).
Reproductive toxicity	No evidence of reproductive toxicity exists (2).
Specific target organ toxicity - single exposure	Not toxic to lung tissue.
Specific target organ toxicity - repeated exposure	Not toxic to lung tissue (6).
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Further information	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours

Persistence and degradability Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.
Food and Drug Administration (FDA)	Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

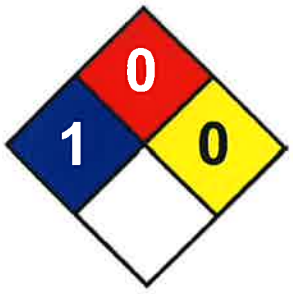
Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	17-December-2013
Revision date	24-March-2017
Version #	02
Further information	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings



List of abbreviations	NFPA: National Fire Protection Association.
References	1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB). 2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER). 3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271. 4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205. 5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350. 6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14. 7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand Mold Tough® Gypsum Liner Panels**

Other means of identification

SDS number 54000003004

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Cellulose	9004-34-6	< 5
Sodium pyrithione	3811-73-2	< 0.25

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains varying levels of respirable crystalline silica, averaging up to 2.0 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact

Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Paper faced with gypsum core.

Physical state Solid.

Form Panel.

Color Gray to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 6 - 8

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	48 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity	Low hazard.
Skin corrosion/irritation	Gypsum was not found to be a skin irritant.
Serious eye damage/eye irritation	Gypsum does not cause serious eye damage or irritation.
Respiratory sensitization	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer (2).
Germ cell mutagenicity	No evidence of mutagenic potential exists (3,4,5).
Carcinogenicity	No evidence of carcinogenic potential exists (6).
Reproductive toxicity	No evidence of reproductive toxicity exists (2).
Specific target organ toxicity - single exposure	Not toxic to lung tissue.
Specific target organ toxicity - repeated exposure	Not toxic to lung tissue (6).
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Further information	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity The product contains a substance which is very toxic to aquatic organisms.

Components		Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

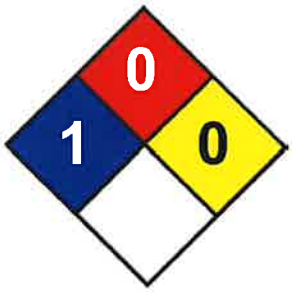
Issue date 18-December-2013

Revision date 20-July-2023

Version # 03

Further information NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings



List of abbreviations NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand Glass-Mat Liner Panels**

Other means of identification

SDS number 54000004001

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Continuous filament glass fiber	65997-17-3	< 5
Sodium pyrithione	3811-73-2	< 0.25

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm3	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1)
		5 mg/m3	Inhalable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm3	Respirable fibers (≤ 3.5 µm in diameter & ≥ 10 µm in length)
		5 mg/m3	Fiber, total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Paper faced with gypsum core.

Physical state Solid.

Form Panel.

Color Gray to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 6 - 8

Melting point/freezing point Not applicable.

Initial boiling point and boiling range Not applicable.

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	48 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Not likely, due to the form of the product.
Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity	Low hazard.
Skin corrosion/irritation	Gypsum was not found to be a skin irritant.
Serious eye damage/eye irritation	Gypsum does not cause serious eye damage or irritation.
Respiratory sensitization	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer (2).
Germ cell mutagenicity	No evidence of mutagenic potential exists (3,4,5).
Carcinogenicity	No evidence of carcinogenic potential exists (6).

IARC Monographs. Overall Evaluation of Carcinogenicity

Continuous filament glass fiber (CAS 65997-17-3)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Continuous filament glass fiber (CAS 65997-17-3)	Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	No evidence of reproductive toxicity exists (2).

Specific target organ toxicity - single exposure	Not toxic to lung tissue.
Specific target organ toxicity - repeated exposure	Not toxic to lung tissue (6).
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Further information	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity The product contains a substance which is very toxic to aquatic organisms.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours

Persistence and degradability	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 19-December-2013

Revision date 24-March-2017

Version # 02

Further information The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings

List of abbreviations	NFPA: National Fire Protection Association.
References	1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB). 2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER). 3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271. 4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205. 5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350. 6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14. 7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **Sheetrock® Brand EcoSmart 5/8" Panels Firecode® X**

Other means of identification

SDS number 54000006003

Synonyms Gypsum Panels, Drywall, Plasterboard, Wallboard

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	> 85
Cellulose	9004-34-6	< 10

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to <1 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene laboratory testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed, and actual employee exposure must be determined by workplace industrial hygiene testing.

4. First-aid measures

Inhalation	Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.
Skin contact	Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Use work methods which minimize dust production. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end. Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. Observe any medical surveillance requirements.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance Paper faced with gypsum core.

Physical state Solid.

Form Panel.

Color Gray to off-white.

Odor Low to no odor.

Odor threshold	Not applicable.
pH	6 - 8
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.32 (Gypsum) (H2O=1)
Solubility(ies)	
Solubility (water)	0.26 g/100 g (H2O)
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	2642 °F (1450 °C)
Viscosity	Not applicable.
Other information	
Bulk density	35 lb/ft³
Particle size	Varies.
VOC (Weight %)	0 %

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).
Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Ingestion	Not likely, due to the form of the product.
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.

Information on toxicological effects

Acute toxicity Low hazard.

Skin corrosion/irritation Gypsum was not found to be a skin irritant (2).

Serious eye damage/eye irritation Gypsum does not cause serious eye damage or irritation.

Respiratory or skin sensitization

Respiratory sensitization No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.

Skin sensitization Not a skin sensitizer (2).

Germ cell mutagenicity No evidence of mutagenic potential exists (3,4,5).

Carcinogenicity No evidence of carcinogenic potential exists (6).

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity No evidence of reproductive toxicity exists (2).

Specific target organ toxicity - single exposure Not toxic to lung tissue.

Specific target organ toxicity - repeated exposure Not toxic to lung tissue (6).

Aspiration hazard Due to the physical form of the product it is not an aspiration hazard.

Further information Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic		
Fish	LC50 Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.

Bioaccumulative potential Bioaccumulation is not expected.

Mobility in soil Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components of this product are in compliance with the listing Requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Cellulose (CAS 9004-34-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 26-April-2016

Revision date 14-May-2019

Version # 03

Further information

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

List of abbreviations

NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkya Nenpo-Tokyo-Toritsu Eisei Kenkynsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand Acoustical Sealant**

Other means of identification

SDS number 61000040001A

Synonyms Sound Blocking Sealant

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium carbonate, synthetic	471-34-1	> 50
Glycerol	56-81-5	< 5

Composition comments All concentrations are in percent by weight.

4. First-aid measures

Inhalation Product cannot be inhaled because it is a paste. When dried, it does not require sanding.

Skin contact Rinse area with plenty of water. Get medical attention if irritation develops and persists.

Eye contact Direct contact with eyes may cause temporary irritation. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion Rinse mouth. Get medical attention if any discomfort occurs.

Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	For personal protection, see Section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use. Filled 4.5 gallon pails of sealant may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Glycerol (CAS 56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium carbonate, synthetic (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear approved safety goggles.

Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Skin protection	
Other	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Paste.
Color	Off-white.
Odor	Acrylic.
Odor threshold	Not applicable.
pH	8 - 10
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	1.6 (H2O=1)
Solubility(ies)	
Solubility (water)	Miscible with water.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	13.4 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC	< 15 g/l

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	Above 1472°F (800°C) limestone ($CaCO_3$) can decompose to lime (CaO) and release carbon dioxide (CO_2).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not relevant, due to the form of the product.
Skin contact	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity Not expected to be a hazard under normal conditions of intended use.

Components	Species	Test Results
Calcium carbonate, synthetic (CAS 471-34-1)		
Acute		
Oral		
LD50	Rat	6450 mg/kg
Glycerol (CAS 56-81-5)		
Acute		
Dermal		
LD50	Rabbit	> 18700 mg/kg
Oral		
LD50	Rat	27200 mg/kg

Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	No data available, but none expected.

Specific target organ toxicity - repeated exposure No data available, but none expected.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause allergic skin disorders in sensitive individuals. For detailed information, see section 16.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Calcium carbonate, synthetic (CAS 471-34-1)			
Aquatic			
Acute			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 56000 mg/l, 96 Hours
Glycerol (CAS 56-81-5)			
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	> 10000 mg/l, 24 Hours

Persistence and degradability No data available.

Bioaccumulative potential Bioaccumulation is not expected.

Partition coefficient n-octanol / water (log Kow)
Glycerol (CAS 56-81-5) -1.76

Mobility in soil No data available.

Other adverse effects None expected.

13. Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.

Local disposal regulations Dispose of in accordance with local regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components of this product are in compliance with the listing Requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Glycerol (CAS 56-81-5) Other Flavoring Substances with OSHA PEL's

US state regulations

US. Massachusetts RTK - Substance List

Glycerol (CAS 56-81-5)

US. New Jersey Worker and Community Right-to-Know Act

Glycerol (CAS 56-81-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Glycerol (CAS 56-81-5)

US. Rhode Island RTK

Glycerol (CAS 56-81-5)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information, including date of preparation or last revision

Issue date 29-October-2015

Revision date 10-June-2024

Version # 03

Further information Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is within the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Bucket NFPA Classification:
Health: 0
Flammability: 1
Physical hazard: 0

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

List of abbreviations NFPA: National Fire Protection Association.

References	Registry of Toxic Effects of Chemical Substances (RTECS) HSDB® - Hazardous Substances Data Bank Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.
Disclaimer	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand EASY SAND™ Lightweight Setting-Type Joint Compound, 5, 20, 45, 90, 210**

Other means of identification

SDS number 61000030002

Synonyms Joint Compound, Finishing Compound, Taping Compound, Mud

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Carcinogenicity (inhalation)	Category 1A
Specific target organ toxicity, repeated exposure	Category 2 (Lung)

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May cause cancer by inhalation. May cause damage to organs (Lung) through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1)	26499-65-0	< 60
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1)	1317-65-3 or 16389-88-1	< 50

Chemical name	CAS number	%
Attapulgite	12174-11-7	< 10
Perlite	93763-70-3	< 10
Calcium sulfate dihydrate	13397-24-5	< 2

Impurities

Chemical name	Common name and synonyms	CAS number	%
Crystalline silica (Quartz)		14808-60-7	< 1.5

Composition comments All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 1.5%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion Plaster of Paris hardens and if ingested may result in stomach and intestinal blockage. Drinking gelatin solutions or large volumes of water may delay setting.

Most important symptoms/effects, acute and delayed Dust may irritate throat and respiratory system and cause coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media Not applicable.

Specific hazards arising from the chemical Not a fire hazard.

Special protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up Vacuum up the spilled material. Vacuums used for this purpose should be equipped with HEPA filters. Containers must be labeled. Collect in approved containers and seal securely. For waste disposal, see Section 13 of the SDS.

Environmental precautions Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling Minimize dust production when mixing, sanding, or opening and closing bags. Avoid inhalation of dust. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices and use appropriate lifting techniques.

Conditions for safe storage, including any incompatibilities Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Avoid contact with acids, water, and moisture.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Impurities	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure. We recommend using wet sanding or vacuum sanding practices to reduce dust exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Skin protection

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Powder.

Color White to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 7.5 - 9.9

Melting point/freezing point Not applicable.

Initial boiling point and boiling range 212 °F (100 °C)

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density	0.6 - 0.7 (H2O=1)
Solubility(ies)	
Solubility (water)	Slightly.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	35 - 45 lb/ft³
VOC	None detected.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	When mixed with water this product can become very hot. Encasing or making moulds of any body part can cause serious burns that may require surgical removal of affected tissue and even amputation of encased body part.
Incompatible materials	Acids.
Hazardous decomposition products	Calcium oxides. Sulfur oxides. Silicon oxides. Above 1472°F (800°C) limestone (CaCO3) can decompose to lime (CaO) and release carbon dioxide (CO2).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Under normal conditions of intended use, this product does not pose a skin hazard.
Eye contact	Direct contact with airborne particulates may cause temporary irritation.
Ingestion	Ingestion may cause irritation and stomach discomfort.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer. Plaster of Paris has displayed little sensitization potential.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Repeated and prolonged exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgite (CAS 12174-11-7)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer

Reproductive toxicity	Not expected to be a reproductive hazard.

Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	May cause damage to organs (lung) through prolonged or repeated exposure.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.
Further information	No additional adverse health effects noted.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Calcium sulfate dihydrate (CAS 13397-24-5)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability	Calcium sulfate dissolves in water forming calcium and sulfate ions.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	No data available.
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects

Toxic Substances Control Act (TSCA) All components on the TSCA 8(b) inventory are designated "active" or are exempt from reporting under the Inventory Update Rule.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Carcinogenicity
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)
Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. New Jersey Worker and Community Right-to-Know Act

Calcium sulfate dihydrate (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)
Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium sulfate dihydrate (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)
Perlite (CAS 93763-70-3)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)

US. Rhode Island RTK

Calcium sulfate dihydrate (CAS 13397-24-5)
Crystalline silica (Quartz) (CAS 14808-60-7)
Limestone (calcium carbonate CAS 1317-65-3 or dolomitic CAS 16389-88-1) (CAS 1317-65-3 or 16389-88-1)

California Proposition 65

WARNING: This product can expose you to chemicals including Attapulgite, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Attapulgite (CAS 12174-11-7)	Listed: December 28, 1999
Crystalline silica (Quartz) (CAS 14808-60-7)	Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Attapulgite (CAS 12174-11-7)

Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 31-December-2013

Revision date 24-March-2021

Version # 04

Further information

Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure per ACGIH.

Plaster of Paris: Is classified as a hazardous substance but is generally considered a safe material for routine use. When plaster of Paris is used responsibly it is not considered as a dangerous material. However, when mixed with water this product can become very hot. DO NOT attempt to make a cast enclosing any part of the body. Encasing any body part can cause serious burns and even amputation of the encased body part.

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

SAFETY DATA SHEET

1. Identification

Product identifier **SHEETROCK® Brand All Purpose Joint Compound, Midweight™, Ready-Mixed**

Other means of identification

SDS number 61000010008

Synonyms Joint Compound (Ready-Mixed) , Taping Compound, Mud, Finishing Compound

Recommended use Interior use.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement None.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Get medical attention/advice if you feel unwell.

Storage Store as indicated in Section 7.

Disposal Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Limestone	1317-65-3	> 60
Attapulgite	12174-11-7	< 5
Mica	12001-26-2	< 5
Perlite	93763-70-3	< 5

Composition comments All concentrations are in percent by weight unless ingredient is a gas.
Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.7%. The OSHA PEL for respirable crystalline silica has been lowered to 0.05 mg/m3, effective June 23, 2016 with compliance dates of June 23, 2017 for construction and June 23, 2018 for general industry. Testing of this product and its constituents suggests that under normal conditions the expected use of this product will not result in exposure to respirable crystalline silica that exceeds the OSHA PEL. However, actual exposures to respirable crystalline silica on a given jobsite must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops or persists.

Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing. May cause allergic skin disorders in sensitive individuals.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not applicable.
Specific hazards arising from the chemical	Not a fire hazard.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Cool material exposed to heat with water spray and remove it if no risk is involved.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Large Spills: Scoop spilled materials and recover as much of the product as possible for use. If spillage is unrecoverable dispose according to local, state, and federal regulations. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling	Avoid inhalation of dust and contact with skin and eyes. Minimize dust generation and accumulation. In case of insufficient ventilation, wear suitable respiratory equipment. Observe good industrial hygiene practices. Use proper lifting techniques.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Protect from moisture. Keep away from heat. Do not use if material has spoiled, i.e., there is a moldy appearance or an unpleasant odor. Keep containers closed when not in use. Filled 4.5 gallon pails of joint compound may be stacked a maximum of 3 layers high on a standard 48 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high. Filled cartons of joint compound may be stacked a maximum of 3 layers high on a standard 42 x 42 or 42 x 48 pallet (16 pails per layer, 3 layers high). Pallets may only be stacked a maximum of two high.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Mica (CAS 12001-26-2)	TWA	20 mppcf

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Mica (CAS 12001-26-2)	TWA	3 mg/m3	Respirable fraction.

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Limestone (CAS 1317-65-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Mica (CAS 12001-26-2)	TWA	3 mg/m3	Respirable.
Perlite (CAS 93763-70-3)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

Thermal hazards None.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance

Physical state Semi-solid.

Form Paste.

Color Off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 7.5 - 9.9

Melting point/freezing point Not applicable.

Initial boiling point and boiling range 212 °F (100 °C)

Flash point Not applicable.

Evaporation rate Not applicable.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%) Not applicable.

Explosive limit - lower (%) Not applicable.

Explosive limit - upper (%) Not applicable.

Vapor pressure Not applicable.

Vapor density Not applicable.

Relative density 1 - 1.3 (H2O=1)

Solubility(ies)	Soluble in water.
Partition coefficient (*n*-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	8.3 - 11 lb/gal
VOC (Weight %)	2 g/l (Calculated by EPA Method 24)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	Above 1472°F (800°C) limestone ($CaCO_3$) can decompose to lime (CaO) and release carbon dioxide (CO_2).

11. Toxicological information

Information on likely routes of exposure

Ingestion	May cause discomfort if swallowed.
Inhalation	Airborne dust may irritate throat and upper respiratory system causing coughing.
Skin contact	May cause allergic skin reactions especially in individuals with pre-existing skin disease such as eczema. (See Section 16).
Eye contact	Airborne dust may cause mechanical eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may irritate eyes and mucous membranes of the nose, throat and upper respiratory system causing sneezing and/or coughing.

Information on toxicological effects

Acute toxicity	Not expected to be a hazard under normal conditions of intended use.
Skin corrosion/irritation	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	The product contains a small amount of sensitizing substance which may provoke an allergic reaction among sensitive individuals after repeated contact. For detailed information, see section 16.
Germ cell mutagenicity	Data does not suggest that this product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not expected to increase the risk of cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Attapulgite (CAS 12174-11-7)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	No data available, but none expected.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged exposure may cause chronic effects. For detailed information, see section 16.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data available.

Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	No data available.
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.
Food and Drug Administration (FDA)	Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Limestone (CAS 1317-65-3)
Mica (CAS 12001-26-2)
Perlite (CAS 93763-70-3)

US. New Jersey Worker and Community Right-to-Know Act

Limestone (CAS 1317-65-3)

Mica (CAS 12001-26-2)
Perlite (CAS 93763-70-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Limestone (CAS 1317-65-3)
Mica (CAS 12001-26-2)
Perlite (CAS 93763-70-3)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Attapulgite (CAS 12174-11-7)

International Inventories

All components of this product are in compliance with the listing Requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. Other information, including date of preparation or last revision

Issue date 21-January-2014

Revision date 20-October-2023

Version # 04

Further information

Attapulgite: Carcinogenic to experimental animals via a route of exposure not relevant to human exposure per ACGIH.

Skin Sensitization Potential: This product contains an amount of Triazinetriethanol (THT) (CAS No. 4719-04-4) that is within the approved EPA regulated limits. THT can act as a sensitizer. Numerous human studies with concentrations up to 1% yielded negative (no sensitization) results. However, some results showed positive reactions in concentrations <0.5% mostly in persons with eczema.

Crystalline silica: Raw materials in this product may contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

Bucket NFPA Classification:
Health: 0
Flammability: 1
Physical hazard: 0

NFPA Ratings:
Health: 1
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA Ratings

List of abbreviations NFPA: National Fire Protection Association.

References

Registry of Toxic Effects of Chemical Substances (RTECS)
HSDB® - Hazardous Substances Data Bank
Torben et al. (2001). Environmental and Health Assessment of Substances in Household Detergents and Cosmetic Products.

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.

United States Steel Corporation

Galvanized (Hot Dipped) Sheet – Carbon Steel

Safety Data Sheet (SDS)

USS IHS Number: 1650

(Replaces USS Code Number: 3C012)

Locations: Irvin, Fairfield, Gary, Granite City, Great Lakes, Hamilton, Fairless

Section 1 – Identification

1(a) Product Identifier Used on Label: Galvanized (Hot Dipped) Sheet – Carbon Steel

1(b) Other Means of Identification: Galvannealed (Hot Dipped) Sheet – Carbon Steel, ACRYZINC Sheet – Carbon Steel

1(c) Recommended Use of the Chemical and Restrictions on Use: None

1(d) Name, Address, and Telephone Number:

United States Steel Corporation
600 Grant Street, Room 1662
Pittsburgh, PA 15219-2800

Phone number : (412) 433-6840 (8:00 am to 5:00 pm)
FAX: (412) 433-5019

1(e) Emergency Phone Number: 1-800-262-8200 (CHEMTREC)

Section 2 – Hazard(s) Identification

2(a) Classification of the Chemical: As sold, this product, **Galvanized (Hot Dipped) Sheet – Carbon Steel** is not hazardous according to the criteria specified in REACH [REGULATION (EC) No 1907/2006] and CLP [REGULATION (EC) No 1272/2008]. Under 29 CFR 1910.1200 Hazard Communication Standard, steel products are considered mixtures due to further processing which may produce dusts and or fume. The categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev. 3" United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information. Precautionary Statement/Emergency Overview: This formed solid metal product poses little or no immediate health or fire hazard. When product is subjected to welding, burning, melting, sawing, brazing, grinding or other similar processes, potentially hazardous airborne particulate and fumes may be generated.

2(b) Signal Word, Hazard Statement(s), Symbols and Precautionary Statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)	Precautionary Statement(s)
	Carcinogenicity-2 Toxic to Reproduction - 2 Single Target Organ Toxicity (STOT) Repeat Exposure - 1	**Danger**	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs through prolonged or repeated inhalation exposure. Harmful if swallowed. May cause an allergic skin reaction. May cause respiratory irritation. Causes eye irritation.	Do not breathe dusts / fume / spray. Wear protective gloves / protective clothing / eye protection / face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in well ventilated areas. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Dispose of contents in accordance with federal, state and local regulations.
	Acute Toxicity-Oral 4 Skin Sensitization - 1 STOT Single Exposure - 3			
NA	Eye Irritation - 2B			

2(c) Hazards Not Otherwise Classified: None Known

2(d) Unknown Acute Toxicity Statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical Name, Common Name (synonyms), CAS Number and Other Identifiers, and Concentration:

Chemical Name	CAS Number	EC Number	% weight
Iron	7439-89-6	231-096-4	>95
Manganese	7439-96-5	231-105-1	≤2.0
Nickel	7440-02-0	231-111-4	≤0.2
Metallic Coating			
Iron	7439-89-6	231-096-4	≤0.8
Zinc	7440-66-6	231-175-3	0.15 – 9.1

EC- European Community
CAS- Chemical Abstract Service

Section 4 – First-aid Measures

4(a) Description of Necessary Measures: If exposed, concerned or feel unwell: Get medical advice/attention.

- **Inhalation: Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped is not a likely form of exposure. However during further processing (welding, grinding, burning, etc.). If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Eye Contact:** This product as sold/shipped is not a likely form of exposure. However during further processing (welding, grinding, burning, etc.). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical advice attention. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Skin Contact:** If on skin: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse.
- **Ingestion:** This product as sold/shipped is not a likely form of exposure. However during further processing (welding, grinding, burning, etc.). If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most Important Symptoms/Effects, Acute and Delayed (chronic):

- **Inhalation:** This product as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye:** This product as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin:** This product as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion:** This product as sold/shipped is not likely to present an acute or chronic health effect.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not applicable for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards Arising From the Chemical: Not applicable for this product as sold/shipped. When burned, toxic smoke and vapor may be emitted.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not applicable for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and Materials for Containment and Clean Up: Not applicable for this product as sold/shipped. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for Safe Handling: Not applicable for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product.

7(b) Conditions for Safe Storage, Including any Incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): Galvanized (Hot Dipped) Sheet – Carbon Steel as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as high temperature (burning, welding), sawing, brazing, machining and grinding may produce fumes and/or particulates. The following exposure limits are offered as reference, for an experience industrial hygienist to review.

Ingredients	8(a) OSHA PEL [1]	ACGIH TLV [2]	NIOSH REL [3]	IDLH [4]
Iron	10 mg/m³ (as iron oxide fume)	5.0 mg/m³ (as iron oxide dust and fume)	5.0 mg/m³ (as iron oxide dust and fume)	2,500 mg Fe/m³
Manganese	"C" 5.0 mg/m³ (as Fume & Mn compounds)	0.2 mg/m³	"C" 5.0 mg/m³ 1.0 mg/m³ (as fume) "STEL" 3.0 mg/m³	500 mg Mn/m³
Nickel	1.0 mg/m³ (as Ni metal & insoluble compounds)	1.5 mg/m³ (as inhalable fraction[5] Ni metal) 0.2 mg/m³ (as inhalable fraction Ni inorganic only insoluble and soluble compounds)	0.015 mg/m³ (as Ni metal & insoluble and soluble compounds)	10 mg/m³ (as Ni)

NE - None Established

1. OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A ("C") designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL) - Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994.
5. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2013 TLVs ® and BEIs ® (Biological Exposure Indices) Appendix D, paragraph A.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

8(c) Individual Protection Measures:

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

  Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.
- **Eyes**: Wear appropriate eye protection to prevent eye contact. For operations, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin**: Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment**: An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Metallic Gray, Odorless

9(b) Odor: NA

9(c) Odor Threshold: NA

9(d) pH: NA

9(j) Upper/lower Flammability or Explosive Limits: NA

9(k) Vapor Pressure: NA

9(l) Vapor Density (Air = 1): NA

9(m) Relative Density: 7.85 g/cc **Coating:** 7.14 g/cc

Section 9 - Physical and Chemical Properties (continued)

9(e) Melting Point/Freezing Point: ~2750 °F (~1510 C), **Coating:** ~2750 °F(~1510 C)

9(f) Initial Boiling Point and Boiling Range: Coating: ~1700 °F(~927 C)

9(g) Flash Point: NA

9(h) Evaporation Rate: NA

9(i) Flammability (solid, gas): Non-flammable, non-combustible

9(n) Solubility(ies): Insoluble

9(o) Partition Coefficient n-octanol/water: ND

9(p) Auto-ignition Temperature: NA

9(q) Decomposition Temperature: ND

9(r) Viscosity: NA

NA - Not Applicable

ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

10(a) Reactivity: Not Determined (ND)

10(b) Chemical Stability: Steel products are stable under normal storage and handling conditions.

10(c) Possibility of Hazardous Reaction: None Known

10(d) Conditions to Avoid: Storage with strong acids or calcium hypochlorite.

10(e) Incompatible Materials: Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

10(f) Hazardous Decomposition Products: Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11(a-e) Information on toxicological effects: The following toxicity data has been determined for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Acute Toxicity Hazard (covers Categories 1-5)	NA*	4[a]		**Warning**	Harmful if swallowed.
Eye Damage/ Irritation (covers Categories 1, 2A and 2B)	NA*	2B[c]	No Pictogram	**Warning**	Causes eye irritation.
Skin/Dermal Sensitization (covers Category 1)	1	1[d]		**Warning**	May cause an allergic skin reaction.
Carcinogenicity (covers Categories 1A, 1B and 2)	2	2[g]		**Warning**	Suspected of causing cancer.
Toxic to Reproduction (covers Categories 1A, 1B and 2)	NA*	2[h]		**Warning**	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	NA*	3[i]		**Warning**	May cause respiratory irritation.
STOT following Repeated Exposure (covers Categories 1 and 2)	1	1[j]		**Danger**	Causes damage to lungs through prolonged or repeated inhalation exposure.

* Not Applicable

Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC_{50} or LD_{50} has been established for **Galvanized (Hot Dipped) Sheet – Carbon Steel**. The following data has been determined for the components:

- **Iron:** Rat LD_{50} =98.6 g/kg (REACH)
  Rat LD_{50} =1060 mg/kg (IUCLID)
  Rat LD_{50} =984 mg/kg (IUCLID)
  Rabbit LD_{50} =890 mg/kg (IUCLID)
  Guinea Pig LD_{50} =20 g/kg (TOXNET)
  Human LD_{LO} =77 g/kg (IUCLID)
- **Nickel:** LD_{50} >9000 mg/kg (Oral/Rat); NOAEC >10.2 mg/l (Inhalation/Rat)
- **Manganese:** Rat LD_{50} > 2000 mg/kg (REACH)
  Rat LD_{50} > 9000 mg/kg (NLM Toxnet)

b. No Skin (Dermal) Irritation data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture or its components.

Section 11 - Toxicological Information (continued)

11(a-e) Information on toxicological effects (continued):

c. No Eye Irritation data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture. The following Eye Irritation information was found for the components:

- **Iron:** Causes eye irritation.
- **Nickel:** Slight eye irritation from particulate abrasion only.

d. No Skin (Dermal) Sensitization data available **for Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture. The following Skin (Dermal) Sensitization information was found for the components:

- **Nickel:** May cause allergic skin sensitization.

e. No Respiratory Sensitization data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture or its components.

f. No Germ Cell Mutagenicity data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture. The following Mutagenicity and Genotoxicity information was found for the components:

- **Iron:** IUCLID has found some positive and negative findings in vitro.
- **Nickel:** EU RAR has found positive results in vitro and in vivo but insufficient data for classification.

g. Carcinogenicity: IARC, NTP, and OSHA do not list **Galvanized (Hot Dipped) Sheet – Carbon Steel** as carcinogens. The following Carcinogenicity information was found for the components:

- **Welding Fumes** - IARC Group 2B carcinogen, a mixture that is possibly carcinogenic to humans.
- **Nickel and certain nickel compounds –** Group 2B - metallic nickel Group 1 - nickel compounds ACGIH confirmed human carcinogen. Nickel – EURAR Insufficient evidence to conclude carcinogenic potential in animals or humans; suspect carcinogen classification Category 2 Suspected of causing cancer.

h. No Toxic to Reproduction data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture. The following Toxic to Reproductive information was found for the components:

- **Nickel**: Effects on fertility.

i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a mixture. The following STOT following a Single Exposure data was found for the components:

- **Iron:** Irritating to respiratory tract.

j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a whole. The following STOT following Repeated Exposure data was found for the components:

- **Nickel**: Rat 4 wk inhalation LOEL 4 mg/m^3 Lung and Lymph node histopathology. Rat 2 yr inhalation LOEL 0.1 mg/ m^3 Pigment in kidney, effects on hematopoiesis spleen and bone marrow and adrenal tumor. Rat 13 Week Inhalation LOAEC 1.0 mg/m^3 Lung weights, and Alveolar histopathology.
- **Manganese**: Inhalation of metal fumes - Degenerative changes in human brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.*, 1966).

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2009, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects by component:

- **Iron and oxides:** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage.
- **Manganese and oxides:** Manganese and Manganese oxide are harmful if swallowed.
- **Nickel and oxides:** Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin.

Delayed (chronic) Effects by component:

- **Iron and oxides**: Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by the International Agency for Research on Cancer (IARC).
- **Manganese and oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (Manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to MnO including: speed and coordination of motor function are especially impaired.
- **Nickel and oxides:** Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer in humans. Causes damage to lungs through prolonged or repeated inhalation exposure. IARC lists nickel and certain nickel compounds as Group 2B carcinogens (sufficient animal data). ACGIH 2013 TLVs® and BEIs® lists insoluble nickel compounds as confirmed human carcinogens. Suspected of damaging the unborn child.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped. However, individual components of the product when processed have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide**: LC_{50}: >1000 mg/L; Fish 48 h-EC_{50} > 100 mg/L (Currenta, 2008k); 96 h-$LC_0 \geq$ 50,000 mg/l. Test substance: Bayferrox 130 red (95 – 97% Fe_2O_3; < 4% SiO_2 and Al_2O_3) (Bayer, 1989a).
- **Nickel Oxide:** IUCLID found LC_{50} in fish, invertebrates and algae > 100 mg/l.

12(b) Persistence & Degradability: No Data Available

12(c) Bioaccumulative Potential: No Data Available

12(d) Mobility (in soil): No data available for **Galvanized (Hot Dipped) Sheet – Carbon Steel** as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Not Reported **Signal Word:** No Signal Word

Hazard Symbol: No Symbol

Hazard Statement: No Statement

Section 13 - Disposal Considerations

Disposal: Galvanized (Hot Dipped) Sheet – Carbon Steel should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Galvanized (Hot Dipped) Sheet – Carbon Steel in its original form. Any alterations can void this information.

Section 14 - Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 **does not** regulate **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: Not Applicable (NA) **Shipping Symbols:** NA **Hazard Class:** NA **UN No.:** NA **Packing Group:** NA **DOT/ IMO Label:** NA **Special Provisions (172.102):** NA	**Packaging Authorizations** **a) Exceptions:** NA **b) Group:** NA **c) Authorization:** NA	**Quantity Limitations** **a) Passenger, Aircraft, or Railcar:** NA **b) Cargo Aircraft Only:** NA **Vessel Stowage Requirements** **a) Vessel Stowage:** NA **b) Other:** NA **DOT Reportable Quantities:** NA

International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a hazardous material.

Shipping Name: Not Applicable (NA) **Classification Code:** NA **UN No.:** NA **Packing Group:** NA **ADR Label:** NA **Special Provisions:** NA **Limited Quantities:** NA	**Packaging** **a) Packing Instructions:** NA **b) Special Packing Provisions:** NA **c) Mixed Packing Provisions:** NA	**Portable Tanks & Bulk Containers** **a) Instructions:** NA **b) Special Provisions:** NA

International Air Transport Association (IATA) does not regulate **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a hazardous material.

Shipping Name: Not Applicable (NA) **Class/Division:** NA **Hazard Label (s):** NA **UN No.:** NA **Packing Group:** NA **Excepted Quantities (EQ):** NA	**Passenger & Cargo Aircraft Limited Quantity (EQ)**		**Cargo Aircraft Only**	**Special Provisions:** NA
	Pkg Inst: NA	**Pkg Inst:** NA	**Pkg Inst:** NA	
	Max Net Qty/Pkg: NA	**Max Net Qty/Pkg:** NA	**Max Net Qty/Pkg:** NA	**ERG Code:** NA

Pkg Inst – Packing Instructions Max Net Qty/Pkg – Maximum Net Quantity per Package ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) Classification: Galvanized (Hot Dipped) Sheet – Carbon Steel does not have a TDG classification.

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to a U. S. Steel product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.* This product and/or its constituents are subject to the following regulations:

SARA Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Section 313 Supplier Notification: The product, **Galvanized (Hot Dipped) Sheet – Carbon Steel** contains the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
7439-96-5	Manganese	2.0 max
7440-02-0	Nickel	0.2 max

State Regulations: The product, **Galvanized (Hot Dipped) Sheet – Carbon Steel** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

California Prop. 65: Contains elements known to the State of California to cause cancer or reproductive toxicity. This includes nickel.

Other Regulations:

WHMIS Classification (Canadian): The product, **Galvanized (Hot Dipped) Sheet – Carbon Steel** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Manganese	B4, D2A
Nickel	D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: United States Steel Corporation

Revision History:

4/28/16 – Update of Adding Fairless to Locations

4/1/2014 - Update to OSHA HAZ COM 2012

Expiration Date: 4/28/19

12/16/10 – Update of content and format to comply with GHS. Replaces USS Code 3C012

8/1/1985 - Original

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

HEALTH= 1, Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn.

PHYSICAL HAZARD= 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

National Fire Protection Association (NFPA)

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FIRE = 0, Materials that will not burn.

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists
BEIs	Biological Exposure Indices
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CNS	Central Nervous System
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
LD_{Lo}	Lowest Dose to have killed animals or humans
LEL	Lower Explosive Limit
LOEL	Lowest Observed Effect Level
LOAEC	Lowest Observable Adverse Effect Concentration
$\mu g/m^3$	microgram per cubic meter of air

NIF	No Information Found
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
ORC	Organization Resources Counselors
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PNOR	Particulate Not Otherwise Regulated
PNOC	Particulate Not Otherwise Classified
PPE	Personal Protective Equipment
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendment and Reauthorization Act
SCBA	Self-contained Breathing Apparatus
SDS	Safety Data Sheet
STEL	Short-term Exposure Limit

Section 16 - Other Information (continued)

ABBREVIATIONS/ACRONYMS:

mg/m^3	milligram per cubic meter of air	**TLV**	Threshold Limit Value
Mppcf	million particles per cubic foot	**TWA**	Time-weighted Average
MSHA	Mine Safety and Health Administration	**UEL**	Upper Explosive Limit
NFPA	National Fire Protection Association		

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, United States Steel Corporation makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

United States Steel Corporation

Galvanized (Hot Dipped) Sheet–High Strength Steel
Safety Data Sheet (SDS)

USS IHS Number: 18138
(Replaces USS Code Number: 3H012)
Locations: Irvin, Fairfield, Gary, Great Lakes, Granite City, Hamilton

Original: 12/16/2010 **Revision: 6/22/2020**

Section 1 – Identification

1(a) Product Identifier Used on Label: Galvanized (Hot Dipped) Sheet–High Strength Steel

1(b) Other Means of Identification: Galvannealed (Hot Dipped) Sheet–High Strength Steel, ACRYZINC® Sheet–High Strength Steel, DUAL-TEN 780® – High Strength Steel, DUAL-TEN 980® – High Strength Steel, TRIP-TEN 780® – High Strength Steel

1(c) Recommended Use of the Chemical and Restrictions on Use: None

1(d) Name, Address, and Telephone Number:

United States Steel Corporation
600 Grant Street, Room 1662
Pittsburgh, PA 15219-2800

Phone number: (412) 433-6840 (8:00 am to 5:00 pm)
FAX: (412) 433-5019

1(e) Emergency Phone Number: 1-800-262-8200 (CHEMTREC)

Section 2 – Hazard(s) Identification

2(a) Classification of the Chemical: As sold, this product, **Galvanized (Hot Dipped) Sheet–High Strength Steel** is not hazardous according to the criteria specified in REACH [REGULATION (EC) No 1907/2006] and CLP [REGULATION (EC) No 1272/2008]. Under 29 CFR 1910.1200 Hazard Communication Standard, steel products are considered mixtures due to further processing which may produce dusts and or fume. The categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev. 3" United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information. Precautionary Statement/Emergency Overview: This formed solid metal product poses little or no immediate health or fire hazard. When product is subjected to welding, burning, melting, sawing, brazing, grinding or other similar processes, potentially hazardous airborne particulate and fumes may be generated.

2(b) Signal Word, Hazard Statement(s), Symbols and Precautionary Statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Carcinogenicity - 2 Toxic to Reproduction - 2 Single Target Organ Toxicity (STOT) Repeat Exposure - 1	**DANGER**	Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to lungs through prolonged or repeated inhalation exposure.
	Acute Toxicity-Oral 4 Skin Sensitization - 1 STOT Single Exposure - 3		Harmful if swallowed. May cause an allergic skin reaction. May cause respiratory irritation.
NA	Eye Irritation - 2B		Causes eye irritation.

Precautionary Statement(s)

Prevention	Response	Storage/Disposal
Do not breathe dusts / fume / spray. Wear protective gloves / protective clothing / eye protection / face protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in well ventilated areas. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.	If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.	Dispose of contents in accordance with federal, state and local regulations.

Section 2 – Hazard(s) Identification (continued)

2(c) Hazards Not Otherwise Classified: None Known

2(d) Unknown Acute Toxicity Statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical Name, Common Name (synonyms), CAS Number and Other Identifiers, and Concentration:

Chemical Name	CAS Number	EC Number	% weight
Iron	7439-89-6	231-096-4	>90
Aluminum	7429-90-5	231-072-3	≤2.0
Chromium	7440-47-3	231-157-5	≤1.5
Manganese	7439-96-5	231-105-1	≤3.0
Molybdenum	7439-98-7	231-107-2	≤1.5
Nickel	7440-02-0	231-111-4	≤0.6
Silicon	7440-21-3	231-130-8	≤2.0
Metallic Coating			
Aluminum	7429-90-5	231-072-3	≤0.055
Iron	7439-89-6	231-096-4	≤0.8
Zinc	7440-66-6	231-175-3	0.15 – 9.1

EC- European Community

CAS- Chemical Abstract Service

Note: Depending on customer specifications, product surface may be treated with trace amounts (<0.01%) of corrosion-inhibiting or rust preventative that contains hexavalent chromium as applied.

Section 4 – First-aid Measures

4(a) Description of Necessary Measures: If exposed, concerned or feel unwell: Get medical advice/attention.

- **Inhalation: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.). If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Eye Contact: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing. If eye irritation persists: Get medical advice/attention. If exposed, concerned or feel unwell: Get medical advice/attention.
- **Skin Contact:** If on skin: Wash thoroughly after handling. Wash with plenty of water. If irritation or rash occurs: Get medical advice/attention. Take off and wash contaminated clothing before reuse.
- **Ingestion: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.). If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most Important Symptoms/Effects, Acute and Delayed (chronic):

- **Inhalation: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion: Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped is not likely to present an acute or chronic health effect.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not applicable for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards Arising from the Chemical: Not applicable for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped. When burned, toxic smoke and vapor may be emitted.

5(c) Special Protective Equipment and Precautions for Fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not applicable for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin.

Section 6 - Accidental Release Measures (continued)

6(b) Methods and Materials for Containment and Clean Up: Not applicable for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped. If material is in a dry state, avoid inhalation of dust. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for Safe Handling: Not applicable for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product.

7(b) Conditions for Safe Storage, Including any Incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): Galvanized (Hot Dipped) Sheet–High Strength Steel as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as high temperature (burning, welding, sawing, brazing, machining and grinding) may produce fumes and/or particulates. The following exposure limits are offered as reference, for an experience industrial hygienist to review.

Ingredients	8(a) OSHA PEL [1]	ACGIH TLV [2]	NIOSH REL [3]	IDLH [4]
Iron	10 mg/m³ (iron oxide fume)	5.0 mg/m³ (iron oxide, respirable fraction [5])	5.0 mg/m³ (iron oxide dust and fume)	2,500 mg/m³ (as Fe)
Aluminum	15 mg/m³ (as aluminum oxide, metal & insoluble compounds, total dust) 5.0 mg/m³ (as aluminum oxide, metal & insoluble compounds, respirable fraction)	1.0 mg/m³ (as metal & insoluble compounds, respirable fraction)	10 mg/m³ (as metal & insoluble compounds, total dust) 5.0 mg/m³ (as metal & insoluble compounds, respirable fraction) 5.0 mg/m³ (as welding fumes & pyro powders)	NE
Chromium	0.5 mg/m³ (as Cr II & III, inorganic compounds) 1.0 mg/m³ (as Cr, metal) 0.005 mg/m³ (as Cr VI, inorganic compounds, water soluble & insoluble) "AL" 0.0025 mg/m³ (as Cr VI, inorganic compounds, water soluble & insoluble)	0.003 mg/m³ (as Cr III, inorganic compounds, inhalable fraction [6]) "DSEN & RSEN" "water-soluble" compounds only 0.5 mg/m³ (as Cr, metal, inhalable fraction) 0.0002 mg/m³ (as Cr VI, inorganic compounds, water insoluble & insoluble) "STEL" 0.0005 mg/m³ (as Cr VI, inorganic compounds, water insoluble & insoluble)	0.5 mg/m³ (as Cr II & III, inorganic compounds & metal) 0.0002 mg/m³ (as Cr VI, inorganic compounds, water insoluble & insoluble)	250 mg/m³ (as Cr II & metal) 25 mg/m³ (as Cr III) 15 mg/m³ (as Cr VI, Ca)
Manganese	"C" 5.0 mg/m³ (as fume & inorganic compounds, as Mn)	0.02 mg/m³ (as fume & inorganic compounds, as Mn, respirable fraction) 0.1 mg/m³ (as fume & inorganic compounds, as Mn, inhalable fraction)	1.0 mg/m³ (as fume & inorganic compounds, as Mn) "STEL" 3.0 mg/m³ (as fume & inorganic compounds, as Mn)	500 mg/m³ (as Mn)
Molybdenum	15 mg/m³ (as Mo insoluble compounds, total dust) 5.0 mg/m³ (as Mo soluble compounds, respirable fraction)	10 mg/m³ (as Mo insoluble compounds, inhalable fraction) 3.0 mg/m³ (as Mo insoluble compounds, respirable fraction) 0.5 mg/m³ (as Mo soluble compounds, respirable fraction)	NE	NE
Nickel	1.0 mg/m³ (metal, insoluble & soluble compounds, as Ni)	1.5 mg/m³ (metal, as Ni, as inhalable fraction) 0.2 mg/m³ (insoluble compounds, as Ni, inhalable fraction, inorganic only) 0.1 mg/m³ (soluble compounds, as Ni, inhalable fraction, inorganic only)	0.015 mg/m³ (metal & insoluble and soluble compounds, as Ni)	10 mg/m³ (as Ni)
Silicon	15 mg/m³ (total dust) 5.0 mg/m³ (as respirable fraction)	NE	10 mg/m³ (as total dust) 5.0 mg/m³ (as respirable dust)	NE
Zinc	15 mg/m³ (as zinc oxide, total dust) 5.0 mg/m³ (as zinc oxide, respirable fraction & zinc oxide fume)	2.0 mg/m³ (as zinc oxide, respirable fraction) "STEL" 10 mg/m³ (as zinc oxide, respirable fraction)	5.0 mg/m³ (as zinc oxide dust or fume) "STEL" 10 mg/m³ (as zinc oxide fume) "C" 15 mg/m³ (as zinc oxide dust)	500 mg/m³ (as zinc oxide)

NE - None Established

1. OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A ("C") designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.

Section 8 - Exposure Controls / Personal Protection (continued)

8(a) Occupational Exposure Limits (OELs) (continued):

2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes. DSEN – May cause dermal sensitization. This notation is used to indicate the potential for dermal sensitization resulting from the interaction of an absorbed agent and ultraviolet light (i.e. photosensitization). RSEN – May cause respiratory sensitization.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994. Ca is designated as carcinogen.
5. Respirable fraction. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in ACGIH 2020 TLVs ® and BEIs ® Appendix D, paragraph C.
6. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2020 TLVs ® and BEIs ® (Biological Exposure Indices) Appendix D, paragraph A.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

8(c) Individual Protection Measures:

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life or Health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

  Warning! Air-purifying respirators both negative-pressure and powered-air do not protect workers in oxygen-deficient atmospheres.
- **Eyes**: Wear appropriate eye protection to prevent eye contact. For operations, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin**: Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations, which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other Protective Equipment**: An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Metallic Gray

9(b) Odor: Odorless

9(c) Odor Threshold: NA

9(d) pH: NA

9(e) Melting Point/Freezing Point: ~2750°F (~1510°C); Coating: ~2750°F (~1510°C)

9(f) Initial Boiling Point and Boiling Range: Coating: ~1700°F (~927°C)

9(g) Flash Point: NA

9(h) Evaporation Rate: NA

9(i) Flammability (solid, gas): Non-flammable, non-combustible

9(j) Upper/lower Flammability or Explosive Limits: NA

9(k) Vapor Pressure: NA

9(l) Vapor Density (Air = 1): NA

9(m) Relative Density: 7.85 g/cc; Coating: 7.14 g/cc

9(n) Solubility(ies): Insoluble

9(o) Partition Coefficient n-octanol/water: ND

9(p) Auto-ignition Temperature: NA

9(q) Decomposition Temperature: ND

9(r) Viscosity: NA

NA - Not Applicable

ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

10(a) Reactivity: Not Determined (ND)

10(b) Chemical Stability: Steel products are stable under normal storage and handling conditions.

10(c) Possibility of Hazardous Reaction: None Known

10(d) Conditions to Avoid: Storage with strong acids or calcium hypochlorite.

Section 10 - Stability and Reactivity (continued)

10(e) Incompatible Materials: Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

10(f) Hazardous Decomposition Products: Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11(a-e) Information on Toxicological Effects: The following toxicity data has been determined for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Acute Toxicity Hazard (covers Categories 1-5)	NA*	4[a]		**Warning**	Harmful if swallowed.
Eye Damage/ Irritation (covers Categories 1, 2A and 2B)	NA*	2B[c]	No Pictogram	**Warning**	Causes eye irritation.
Skin/Dermal Sensitization (covers Category 1)	NA*	1[d]		**Warning**	May cause an allergic skin reaction.
Carcinogenicity (covers Categories 1A, 1B and 2)	NA*	2[g]		**Warning**	Suspected of causing cancer.
Toxic to Reproduction (covers Categories 1A, 1B and 2)	NA*	2[h]		**Warning**	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	NA*	3[i]		**Warning**	May cause respiratory irritation.
STOT following Repeated Exposure (covers Categories 1 and 2)	NA*	1[j]		**Danger**	Causes damage to lungs through prolonged or repeated inhalation exposure.

* Not Applicable

Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC_{50} or LD_{50} has been established for **Galvanized (Hot Dipped) Sheet–High Strength Steel**. The following data has been determined for the components:

- **Iron:** Rat LD_{50} =98.6 g/kg (REACH)
  Rat LD_{50} =1060 mg/kg (IUCLID)
  Rat LD_{50} =984 mg/kg (IUCLID)
  Rabbit LD_{50} =890 mg/kg (IUCLID)
  Guinea Pig LD_{50} =20 g/kg (TOXNET)
  Human LD_{LO} =77 g/kg (IUCLID)
- **Aluminum:** Rat LD_{50} > 15.9 g/kg (REACH)
- **Nickel:** LD_{50} >9000 mg/kg (Oral/Rat); NOAEC >10.2 mg/l(Inhalation/Rat)
- **Silicon:** LD_{50} = 3160 mg/kg (Oral/Rat)
- **Manganese:** Rat LD_{50} > 2000 mg/kg (REACH)
  Rat LD_{50} > 9000 mg/kg (NLM Toxnet)
- **Zinc**: Rat LD_{50} > 2000 mg/kg

b. No Skin (Dermal) Irritation data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture. The following Skin (Dermal) Irritation information was found for the components:

- **Molybdenum:** May cause skin irritation.

c. No Eye Irritation data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture. The following Eye Irritation information was found for the components:

- **Iron and Molybdenum:** Causes eye irritation.
- **Silicon:** Slight eye irritation in rabbit protocol.
- **Nickel:** Slight eye irritation from particulate abrasion only.

d. No Skin (Dermal) Sensitization data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture. The following Skin (Dermal) Sensitization information was found for the components:

- **Nickel:** May cause allergic skin sensitization.

e. No Respiratory Sensitization data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture or its components.

f. No Germ Cell Mutagenicity data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture. The following Mutagenicity and Genotoxicity information was found for the components:

- **Iron:** IUCLID has found some positive and negative findings in vitro.
- **Aluminum:** IUCLID; ATSDR have found this ingredient is not mutagenic *in vitro*; but has marginal effects *in vivo*.
- **Nickel:** EU RAR has found positive results in vitro and in vivo but insufficient data for classification.

Section 11 - Toxicological Information (continued)

11(a-e) Information on Toxicological Effects (continued):

g. Carcinogenicity: IARC, NTP, and OSHA do not list **Galvanized (Hot Dipped) Sheet–High Strength Steel** as carcinogens. The following Carcinogenicity information was found for the components:

- **Nickel and certain nickel compounds** – IARC-1 (compounds), carcinogen to humans; IARC-2B (elemental & alloys), possibly carcinogenic to humans; ACGIH TLV-A1 (insoluble compounds, as Ni), confirmed human carcinogen; TLV-A5 (elemental), not suspected as a human carcinogen; NTP–K, known to be a carcinogen; NIOSH–Ca, potential occupational carcinogen
- **Welding Fumes:** IARC-2B, possibly carcinogenic to humans; NIOSH–Ca, potential occupational carcinogen.
- **Iron Oxide (Fe_2O_3):** IARC-3, unclassifiable as to carcinogenicity in humans; ACGIH TLV-4, not classifiable as a human carcinogen.
- **Chromium (as metal and trivalent chromium compounds)** – IARC-3 (organic & inorganic compounds), unclassifiable as to carcinogenicity in humans; ACGIH TLV-A4, not classifiable as a human carcinogen; EPA-D, not classifiable as to human carcinogenicity (CBD, cannot be determined).
- **Chromium (hexavalent)** - IARC-1, carcinogen to humans; ACGIH TLV-A1, confirmed human carcinogen; NIOSH–Ca, potential occupational carcinogen; NTP–K, known to be a carcinogen; EPA-A, human carcinogen (by inhalation route of entry), EPA-K, cannot be determined, not classifiable as to human carcinogenicity.

g. No Toxic to Reproduction data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture. The following Toxic to Reproductive information was found for the components:

- **Nickel**: Effects on fertility.

h. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a mixture. The following STOT following a Single Exposure data was found for the components:

- **Iron and Molybdenum:** Irritating to respiratory tract.
- **Aluminum**: Repeated exposure associated with Asthma, fibrosis in lungs and encephalopathy in humans.

i. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a whole. The following STOT following Repeated Exposure data was found for the components:

- **Aluminum:** Reviews have found chronic exposure to aluminum flake has been reported to cause pneumoconiosis in workers. Repeat oral exposure to aluminum results in decrements in neurobehavioral function and development.
- **Nickel**: Rat 4 wk inhalation LOEL 4 mg/m^3 Lung and Lymph node histopathology. Rat 2 yr inhalation LOEL 0.1 mg/ m^3 Pigment in kidney, effects on hematopoiesis spleen and bone marrow and adrenal tumor. Rat 13 Week Inhalation LOAEC 1.0 mg/m^3 Lung weights, and Alveolar histopathology.
- **Manganese**: Inhalation of metal fumes - Degenerative changes in human Brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.,* 1966).

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2020, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects by component:

- **Iron and Oxides:** Iron is harmful if swallowed, causes skin irritation, and causes eye irritation. Contact with iron oxide has been reported to cause skin irritation and serious eye damage.
- **Aluminum:** Not Reported/ Not Classified
- **Chromium, Oxides and Hexavalent Chrome:** Hexavalent chrome causes damage to gastrointestinal tract, lung, severe skin burns and eye damage, serious eye damage, skin contact may cause an allergic skin reaction. Inhalation may cause allergic or asthmatic symptoms or breathing difficulties.
- **Manganese and Oxides:** Manganese and Manganese oxide are harmful if swallowed.
- **Molybdenum and Oxides:** Molybdenum causes skin and eye irritation. Molybdenum oxide is toxic if swallowed and causes eye irritation.
- **Nickel and Oxides:** Nickel may cause allergic skin sensitization. Nickel oxide may cause an allergic skin.
- **Silicon and Oxides:** May be harmful if swallowed.
- **Zinc:** Not Reported/ Not Classified

Delayed (chronic) Effects by Component:

- **Iron and Oxides**: Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of ferric oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. Iron oxide is listed as a Group 3 (not classifiable) carcinogen by IARC.
- **Aluminum**: Chronic inhalation of finely divided powder has been reported to cause pulmonary fibrosis and emphysema. Repeated skin contact has been associated with bleeding into the tissue, delayed hypersensitivity and granulomas. Chronic exposure to aluminum flake has been reported to cause pneumoconiosis in workers. Repeat oral exposure to aluminum results in decrements in neurobehavioral function and development.
- **Manganese and Oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (Manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to MnO including: speed and coordination of motor function are especially impaired.

Section 11 - Toxicological Information (continued)

Delayed (chronic) Effects by Component:(continued)

- **Chromium, Oxides and Hexavalent Chromium:** The health hazards associated with exposure to chromium are dependent upon its oxidation state. The metal form (chromium as it exists in this product) is of very low toxicity. The hexavalent form is very toxic. Repeated or prolonged exposure to hexavalent chromium compounds may cause respiratory irritation, nosebleed, ulceration and perforation of the nasal septum. Industrial exposure to certain forms of hexavalent chromium has been related to an increased incidence of cancer. NTP Fourth Annual report on Carcinogens cites "certain Chromium compounds" as human carcinogens. ACGIH has reviewed the toxicity data and concluded that chromium metal is not classifiable as a human carcinogen. Hexavalent chromium may cause genetic defects and is suspected of damaging the unborn child. Developmental toxicity in the mouse, suspected of damaging fertility or the unborn child.
- **Molybdenum and Oxides:** Certain handling operations, such as burning and welding, may generate both insoluble molybdenum compounds (metal and molybdenum dioxide) and soluble molybdenum compounds (molybdenum trioxide). Molybdenum compounds generally exhibit a low order of toxicity with the trioxide the more toxic. However, some reports indicate that the dust of the molybdenum metal, molybdenum dioxide and molybdenum trioxide may cause eye, skin, nose and throat irritation in animals. Also, it has been reported to cause induction of tumors in experimental animals, suspected of causing cancer. Molybdenum oxide is suspected of causing cancer in humans.
- **Nickel and Oxides:** Exposure to nickel dusts and fumes can cause sensitization dermatitis, respiratory irritation, asthma, pulmonary fibrosis, edema, and may cause nasal or lung cancer in humans. Causes damage to lungs through prolonged or repeated inhalation exposure. IARC lists nickel and certain nickel compounds as Group 2B carcinogens (sufficient animal data). ACGIH 2020 TLVs® and BEIs® lists insoluble nickel compounds as confirmed human carcinogens. Suspected of damaging the unborn child.
- **Silicon and Oxides:** Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust. Eye contact with pure material can cause particulate irritation. Skin contact with silicon dusts may cause physical abrasion.
- **Zinc:** Zinc Residue CGLs are a low health risk by inhalation and should be treated as a nuisance dust. Inhalation of zinc oxide fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Galvanized (Hot Dipped) Sheet–High Strength Steel** as sold/shipped. However, individual components of the product when processed have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Iron Oxide**: LC_{50}: >1000 mg/L; Fish 48 h-EC_{50} > 100 mg/L (Currenta, 2008k); 96 h-$LC_0 \geq$ 50,000 mg/L. Test substance: Bayferrox 130 red (95 – 97% Fe_2O_3; < 4% SiO_2 and Al_2O_3) (Bayer, 1989a).
- **Aluminum Oxide:** LC_{50} >100 mg/l for fish and algae.
- **Hexavalent Chrome:** EU RAR listed as category 1, found acute EC_{50} and LD_{50} to algae and invertebrates < 1 mg.
- **Nickel Oxide:** IUCLID found LC_{50} in fish, invertebrates and algae > 100 mg/l.
- **Zinc and Zinc Oxide:** EU RAR lists as Category 1 Very toxic to aquatic life with long lasting effects.

12(b) Persistence & Degradability: No Data Available

12(c) Bioaccumulative Potential: No Data Available

12(d) Mobility (in soil): No data available for this product as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other Adverse Effects: None Known

Additional Information:

Hazard Category: Category 1 **Signal Word:** Warning

Hazard Symbol:

Hazard Statement: Very Toxic to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

Disposal: Galvanized (Hot Dipped) Sheet–High Strength Steel should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 16-01-17 (ferrous metals), 12-01-99 (wastes not otherwise specified), 16-03 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Galvanized (Hot Dipped) Sheet–High Strength Steel in its original form. Any alterations can void this information.

Section 14 - Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 **does not** regulate **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: Not Applicable (NA) **Shipping Symbols:** NA **Hazard Class:** NA **UN No.:** NA **Packing Group:** NA **DOT/ IMO Label:** NA **Special Provisions (172.102):** NA	**Packaging Authorizations** **a) Exceptions:** NA **b) Group:** NA **c) Authorization:** NA	**Quantity Limitations** **a) Passenger, Aircraft, or Railcar:** NA **b) Cargo Aircraft Only:** NA **Vessel Stowage Requirements** **a) Vessel Stowage:** NA **b) Other:** NA **DOT Reportable Quantities:** NA

International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a hazardous material.

Shipping Name: Not Applicable (NA) **Classification Code:** NA **UN No.:** NA **Packing Group:** NA **ADR Label:** NA **Special Provisions:** NA **Limited Quantities:** NA	**Packaging** **a) Packing Instructions:** NA **b) Special Packing Provisions:** NA **c) Mixed Packing Provisions:** NA	**Portable Tanks & Bulk Containers** **a) Instructions:** NA **b) Special Provisions:** NA

International Air Transport Association (IATA) does not regulate **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a hazardous material.

Shipping Name: Not Applicable (NA) **Class/Division:** NA **Hazard Label (s):** NA **UN No.:** NA **Packing Group:** NA **Excepted Quantities (EQ):** NA	**Passenger & Cargo Aircraft** **Limited Quantity (EQ)**		**Cargo Aircraft Only:** **Pkg Inst:** NA **Max Net Qty/Pkg:** NA	**Special Provisions:** NA **ERG Code:** NA
	Pkg Inst: NA **Max Net Qty/Pkg:** NA	**Pkg Inst:** NA **Max Net Qty/Pkg:** NA		

Pkg Inst – Packing Instructions Max Net Qty/Pkg – Maximum Net Quantity per Package ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) Classification: Galvanized (Hot Dipped) Sheet–High Strength Steel does not have a TDG classification.

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to a U. S. Steel product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.*

This product and/or its constituents are subject to the following regulations:

SARA Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Section 313 Supplier Notification: The product, **Galvanized (Hot Dipped) Sheet–High Strength Steel** contains the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
7440-47-3	Chromium	1.5 max
7439-96-5	Manganese	3.0 max
7440-02-0	Nickel	0.6 max

State Regulations: The product, **Galvanized (Hot Dipped) Sheet–High Strength Steel** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

California Prop. 65:

This product can expose you to chemicals including nickel (metallic) which is known to the State of California to cause cancer; and no chemicals which is known to the State of California to cause reproductive toxicity. In addition, this product can be ordered with an optional passivation treatment that contains hexavalent chromium, which is known to the State of California to cause cancer and to cause reproductive toxicity. For more information go to www.P65Warnings.ca.gov.

Section 15 - Regulatory Information (continued)

Other Regulations:

WHMIS Classification (Canadian): The product, **Galvanized (Hot Dipped) Sheet–High Strength Steel** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Iron	Combustible dusts - Category 1
Manganese	Reproductive toxicity - Category 2; Specific target organ toxicity - repeated exposure - Category 1; Combustible dusts*
Molybdenum	Combustible dusts*
Chromium	Combustible dusts*
Nickel	Skin sensitization – Category 1; Carcinogenicity – Category 2; Specific target organ toxicity – repeated exposure - Category 1
Silicon	Flammable solids - Category 2 (The classification "Flammable solids" refers to the amorphous form of silicon powder); Combustible dusts**

*This product could belong to the hazard class "Combustible dust", based on various factors related to the combustibility and explosiveness of its dust, including composition, shape and size of the particles

** This product belongs to the hazard class "Combustible dust" if 5% or more by weight of its composition has a particle size < 500 µm.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulation.

Section 16 - Other Information

Prepared By: United States Steel Corporation

Revision History:

6/22/2020 – Update Sections 8, 11 & 15
8/01/2018 – Update Sections 2, 8, 11, 15
5/01/2017 – Update WHMIS 2015
4/1/2014 - Update to OSHA HAZ COM 2012

Expiration Date: 6/22/2023 (For shipments to Canada only)
12/16/10 – Update of content and format to comply with GHS. USS IHS Number 18138 replaces USS Code Number 3H012.
08/01/1985- Original

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

HEALTH= **1**, Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.
FIRE= **0**, Materials that will not burn.
PHYSICAL HAZARD= **0**, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

National Fire Protection Association (NFPA)

HEALTH = **1**, Exposure could cause irritation but only minor residual injury even if no treatment is given.
FIRE = **0**, Materials that will not burn.
INSTABILITY = **0**, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	**NIF**	No Information Found
BEIs	Biological Exposure Indices	**NIOSH**	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service	**NTP**	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	**ORC**	Organization Resources Counselors
CFR	Code of Federal Regulations	**OSHA**	Occupational Safety and Health Administration
CNS	Central Nervous System	**PEL**	Permissible Exposure Limit
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract	**PNOR**	Particulate Not Otherwise Regulated
HMIS	Hazardous Materials Identification System	**PNOC**	Particulate Not Otherwise Classified
IARC	International Agency for Research on Cancer	**PPE**	Personal Protective Equipment
LC50	Median Lethal Concentration	**ppm**	parts per million
LD50	Median Lethal Dose	**RCRA**	Resource Conservation and Recovery Act
LD_{Lo}	Lowest Dose to have killed animals or humans	**RTECS**	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit	**SARA**	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level	**SCBA**	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration	**SDS**	Safety Data Sheet
µg/m³	microgram per cubic meter of air	**STEL**	Short-term Exposure Limit
mg/m³	milligram per cubic meter of air	**TLV**	Threshold Limit Value
mppcf	million particles per cubic foot	**TWA**	Time-weighted Average
MSHA	Mine Safety and Health Administration	**UEL**	Upper Explosive Limit
NFPA	National Fire Protection Association		

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, United States Steel Corporation makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

SYNTHETIC IRON OXIDE RED 1117

Version	Revision Date:	SDS Number:	Date of last issue: 04/26/2017
2.1	03/14/2018	400000002716	Date of first issue: 11/03/2016

SECTION 1. IDENTIFICATION

Product name : SYNTHETIC IRON OXIDE RED 1117

Manufacturer or supplier's details

Company name of supplier : Venator Americas LLC
Address : 10001 Woodloch Forest Drive
The Woodlands,
TX 77380
United States of America (USA)
Telephone : (001) 844 831 6720
Telefax : (001) 281 465 6731

E-mail address of person responsible for the SDS : msds@venatorcorp.com

Emergency telephone number : USA & Canada: +1-800-424-9300 Other Americas: +1-703-741-5970 [CCN 820025]

Recommended use of the chemical and restrictions on use

Recommended use : Industrial use
Colouring agents, pigments

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
diiron trioxide	1309-37-1	95 - 100
limestone	1317-65-3	1 - 3

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

General advice	:	Consult a physician.
If inhaled	:	If breathed in, move person into fresh air. Get medical attention if symptoms occur.
In case of skin contact	:	Wash off with soap and water. Call a physician if irritation develops or persists.
In case of eye contact	:	Rinse with water. If eye irritation persists, consult a specialist.
If swallowed	:	Rinse mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	Dust contact with the eyes can lead to mechanical irritation. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. The product is not irritant but as with all fine powders can absorb moisture and natural oils from the surface of the skin during prolonged exposure. Individuals with sensitive skin may experience skin drying on prolonged or repeated exposure.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.
Notes to physician	:	No specific measures identified.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Dry powder Carbon dioxide (CO2)
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Cool closed containers exposed to fire with water spray.
Hazardous combustion products	:	No hazardous combustion products are known
Specific extinguishing	:	Use extinguishing measures that are appropriate to local

methods		circumstances and the surrounding environment.
Further information	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Remove all sources of ignition. Never return spills in original containers for re-use. Treat recovered material as described in the section "Disposal considerations". For disposal considerations see section 13.
Environmental precautions	:	No special environmental precautions required. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Keep in suitable, closed containers for disposal. Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid creating dusty conditions and prevent wind dispersal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Advice on safe handling	:	Minimize dust generation and accumulation. Avoid formation of respirable particles. Avoid inhalation, ingestion and contact with skin and eyes. Avoid exposure - obtain special instructions before use. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Further information on	:	Keep in a dry place.

storage stability

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
diiron trioxide	1309-37-1	TWA (Respirable fraction)	5 mg/m3	ACGIH
		TWA (Fumes)	10 mg/m3	OSHA Z-1
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
limestone	1317-65-3	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1

Engineering measures : Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines

Hand protection
Directive : Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US).

Eye protection : Safety glasses
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Protective measures : Wear suitable protective equipment.

Hygiene measures : Wash hands before breaks and immediately after handling the product.
Remove contaminated clothing and protective equipment

before entering eating areas.
Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	red brown, red
Odour	:	odourless
Odour Threshold	:	No data available
pH	:	4 - 8 Concentration: 10 %
	:	> 1,000 °C
Boiling point		No data is available on the product itself.
Flash point	:	No data is available on the product itself.
Evaporation rate	:	No data is available on the product itself.
Flammability (solid, gas)	:	No data is available on the product itself.
Flammability (liquids)	:	No data is available on the product itself.
Upper explosion limit / Upper flammability limit	:	No data is available on the product itself.
Lower explosion limit / Lower flammability limit	:	No data is available on the product itself.
Vapour pressure	:	No data is available on the product itself.
Relative vapour density	:	No data is available on the product itself.
Relative density	:	No data is available on the product itself.
Density	:	No data is available on the product itself.
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data is available on the product itself.
Partition coefficient: n-octanol/water	:	No data is available on the product itself.
Auto-ignition temperature	:	No data is available on the product itself.

Thermal decomposition	:	No data is available on the product itself.
Self-Accelerating decomposition temperature (SADT)	:	No data is available on the product itself.
Viscosity	:	No data is available on the product itself.
Explosive properties	:	No data is available on the product itself.
Oxidizing properties	:	No data is available on the product itself.
Particle size	:	No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	:	No data available
Incompatible materials	:	peroxides, e.g. hydrogen peroxide aluminum dust calcium hypochlorite hydrazine Ethylene oxide caesium carbide
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data is available on the product itself.

Acute toxicity

Components:

diiron trioxide:

Acute oral toxicityComponents : LD50 (Rat, male and female): > 5,000 mg/kg
Method: EC Directive 92/69/EEC B.1 Acute Toxicity (Oral)

LD50 (Rat, male): > 10,000 mg/kg
Method: OECD Test Guideline 401

limestone:

Acute oral toxicityComponents : LD50 (Rat): 6,450 mg/kg

Components:

diiron trioxide:

Acute inhalation toxicity : LC50 (Rat, male and female): 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : No data available

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation

Components:

diiron trioxide:
Species: Rabbit
Exposure time: 4 h
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Components:

diiron trioxide:
Species: Rabbit
Result: No eye irritation
Exposure time: 24 h
Assessment: No eye irritation
Method: OECD Test Guideline 405

limestone:
Species: Rabbit
Result: Mechanical irritation of the eyes is possible.
Assessment: No eye irritation

Respiratory or skin sensitisation

Components:

diiron trioxide:
Exposure routes: Dermal
Species: No information available.
Assessment: Did not cause sensitisation on laboratory animals.
Method: Other guidelines
Result: Does not cause skin sensitisation.

Exposure routes: Skin
Species: Mouse
Method: OECD Test Guideline 429
Result: Does not cause skin sensitisation.

limestone:
Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Assessment: No data available

Germ cell mutagenicity

Components:

diiron trioxide:
Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Concentration: 8 - 40 - 200 - 1000 - 5000 µg/
Metabolic activation: with and without metabolic activation
Method: reverse mutation assay
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster lung cells
Concentration: 0, 6.25, 12.5 and 25 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Components:

diiron trioxide:
Genotoxicity in vivo : Test Type: in vivo assay
Species: Rat (female)
Dose: 0, 500, 1000, or 2000 mg/kg bw
Result: negative

Test Type: in vivo assay
Species: Rat (male)
Dose: 3.75 mg/kg bw
Result: negative

Carcinogenicity

Components:

diiron trioxide:
Species: Rat, (male and female)
Application Route: Intraperitoneal injection
Exposure time: 790 - 914 days
Result: negative

Species: Rat, (male and female)
Application Route: Intraperitoneal injection
Exposure time: 798 days
Result: negative

Carcinogenicity - Assessment : No data available

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Effects on fertility	: No data available
Effects on foetal development	: No data available
Reproductive toxicity - Assessment	: No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

diiron trioxide:
Species: Rat, male
>= 30 mg/m3
Application Route: inhalation (dust/mist/fume)
Test atmosphere: dust/mist
Exposure time: 5 days

Repeated dose toxicity - Assessment	: No data available

Aspiration toxicity

No data available

Experience with human exposure

General Information:	No data available
Inhalation:	No data available
Skin contact:	No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Ingestion: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

diiron trioxide:

Toxicity to fish : EC50 (Brachydanio rerio (zebrafish)): > 50,000 mg/l
Exposure time: 96 h
Test Type: static test

limestone:

Toxicity to fish : LC50: > 56,000 mg/l
Exposure time: 96 h

Components:

diiron trioxide:

Toxicity to daphnia and other aquatic invertebrates : EC50: > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Components:

diiron trioxide:

Toxicity to algae : EC50 (Other): > 100 mg/l

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

Components:

limestone:

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	EC50 (Daphnia magna (Water flea)): > 350 mg/l Exposure time: 125 d Test Type: semi-static test Test substance: Fresh water
M-Factor (Chronic aquatic toxicity)	:	No data available

Components:

diiron trioxide:

Toxicity to microorganisms	:	EC50 (activated sludge): > 10,000 mg/l Exposure time: 3 h Test Type: static test Method: ISO 8192
Toxicity to soil dwelling organisms	:	No data available
Plant toxicity	:	No data available
Sediment toxicity	:	No data available
Toxicity to terrestrial organisms	:	No data available

Ecotoxicology Assessment

Acute aquatic toxicity	:	No data available
Chronic aquatic toxicity	:	No data available
Toxicity Data on Soil	:	No data available
Other organisms relevant to the environment	:	No data available

Persistence and degradability

Biodegradability - Product	:	Result: Not readily biodegradable.

Components:

diiron trioxide:

Biochemical Oxygen Demand (BOD)	:	0 mgO2/g

Components:

diiron trioxide:

Chemical Oxygen Demand (COD)	:	0 mgO2/g
BOD/COD	:	No data available
ThOD	:	No data available

BOD/ThOD	:	No data available
Dissolved organic carbon (DOC)	:	No data available
Physico-chemical removability	:	No data available
Stability in water	:	No data available
Photodegradation	:	No data available
Impact on Sewage Treatment	:	No data available

Bioaccumulative potential

Bioaccumulation - Product	:	Remarks: Bioaccumulation is unlikely.

Components:

limestone:

Partition coefficient: n-octanol/water	:	log Pow: < 1 Method: No information available.

Mobility in soil

Mobility	:	No data available
Distribution among environmental compartments	:	No data available
Stability in soil	:	No data available

Other adverse effects

Environmental fate and pathways	:	No data available
Results of PBT and vPvB assessment - Product	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting potential	:	No data available
Adsorbed organic bound halogens (AOX)	:	No data available

Hazardous to the ozone layer

Ozone-Depletion Potential	:	Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the

U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information	:	No data available
Global warming potential (GWP)	:	No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of wastes in an approved waste disposal facility.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA
Not regulated as dangerous goods

IMDG
Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

DOT Classification
Not regulated as dangerous goods

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

California Prop. 65

WARNING! This product can expose you to chemicals, as trace impurities and not intentionally added, known to the State of California to cause cancer (C), birth defects (M) or other reproductive (R) harm. For more information, go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

CH INV	:	The formulation contains substances listed on the Swiss Inventory, On the inventory, or in compliance with the inventory
DSL	:	This product contains one or several components listed in the Canadian NDSL.
AICS	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

TSCA - 5(a) Significant New Use Rule List of Chemicals
No substances are subject to a Significant New Use Rule.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
No substances are subject to TSCA 12(b) export notification requirements.

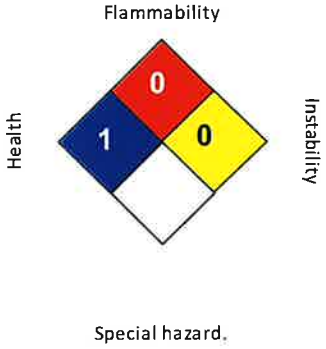
TSCA - 5(a) Significant New Use Rule List of Chemicals
No substances are subject to a Significant New Use Rule.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)
No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS® IV:

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

LABEL CODE : N/A

Sources of key data used to compile the Safety Data Sheet	:	Information taken from reference works and the literature., Information derived from practical experience.
Revision Date	:	03/14/2018
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
OSHA Z-1 / TWA	:	8-hour time weighted average

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

The trademarks above are the property of Venator Materials PLC or an affiliate thereof.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED VENATOR EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR VENATOR PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE.

Olin WINCHESTER AMMUNITION

SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Standard JIS Z 7250:2000, and EU REACH Regulations

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	**CARTRIDGES - FOR TOOLS, BLANK or CARTRIDGES, POWER DEVICES**
CAS Number:	Mixture – Metal Alloy
Synonyms:	Rimfire Cartridge for Power Device, Centerfire Powertool Loaded Round, 22, 25, 27, 32, 38 Caliber Powertool Round, Power Load, Blank Power Load and/or Booster, Powder Load, Cartridges for Tools, Blank
Product Use:	Powertool Loaded Round
U.N. Number:	UN 0014 or UN 0323
U.N. Dangerous Goods Class	Explosive, 1.4S
Manufacturer/Responsible Party:	Olin Winchester, LLC
Manufacturers' Address:	600 Powder Mill Road, East Alton, IL 62024 www.winchester.com
Emergency Telephone Number:	US/Canada: 1-800-424-9300 Outside US/Canada: 703-527-3887
SDS Control Group:	618-258-3507 (Technical Information Only)

Olin SDS No.: 00102.0001 **Issue Date:** 6/1/15

Revision Date: 01/17/2022

Revision No.: 8

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: EXPLOSIVE. KEEP AWAY FROM HEAT. DO NOT SUBJECT TO MECHANICAL SHOCK. PARTICLES FROM FIRING MAY BE HARMFUL IF INHALED. DO NOT TAKE INTERNALLY.

US DOT SYMBOLS

CANADA (WHMIS) SYMBOLS

This Product is not subject to WHMIS

Class 6 Explosive

GHS HAZARD SYMBOLS

GHS Classifications:

Carcinogenicity Category 1A
Reproductive Toxicity Category 1A
Explosive Division 1.4
STOT RE Category 1
Aquatic Environment, Chronic II

Signal Word:

Danger

Hazard Statements :

H204: Fire or projection hazard
H350: May cause cancer
H360: May damage fertility or the unborn child
H362: May cause harm to breast-fed children
H372: Causes damage to nervous system, kidney, and hematopoietic system through prolonged or repeated exposure
H360: May damage fertility or the unborn child
H411: Toxic to aquatic life with long lasting effects

Target organs:

Nervous, renal and hematopoietic systems

Precautionary Statements:

P102: Keep out of reach of children
P210: Keep away from heat/sparks/open flame/hot surfaces
P250: Do not subject to shock/friction
P260: Do not breathe dust/fume/gas/mist/vapors/spray
P264: Wash hands thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection

GHS Pictograms:

Explosive; Pictogram: exploding bomb
Specific Target Organ Toxicity; Pictogram Code: GHS08
Environment; Pictogram Code: GHS09

EU Classifications:

Hazard Symbols	E, T, N
Risk Phrases	R2: Risk of explosion by shock, friction, fire or other sources of ignition R45 (Category 1): May cause cancer R48: Danger of serious damage to health by prolonged exposure R60/61 (Category 1): May impair fertility or cause harm to the unborn child R63: Possible risk of harm to the unborn child R64: May cause harm to breast-fed children R51/53: Toxic to aquatic organisms and many cause long-term adverse effects in the aquatic environment
Safety Phrases	S2: Keep out of reach of children S15: Keep away from heat S20/21: When using do not eat, drink or smoke S22: Do not breathe dust S39: Wear eye/face protection S51: Use only in well-ventilated areas S61: Avoid release to the environment

Health Hazards or Risks From Exposure

This product is composed of a finished metal alloy cartridge which contains the various components completely sealed within. Therefore, under normal handling of this product, no exposure to any harmful materials will occur. When the product is fired, a small amount of particles may be generated which may be slightly irritating to the eyes and the respiratory tract. The particles may contain trace amounts of these harmful substances:

Lead: Ingestion of large amounts of lead can cause abdominal pain, constipation, cramps, nausea and/or vomiting. Chronic exposure to lead can cause kidney damage, anemia, reproductive effects, developmental effects and permanent nervous system damage in humans including changes in cognitive function. Occupational exposure to lead is associated with lung and stomach cancer. Lead is classified as a probable human carcinogen.

Nitroglycerin: Will produce dilation of blood vessels and drop in blood pressure which may affect the heart. It has also been shown to cause methemoglobinemia (cyanosis).
Copper: Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain.

It is unlikely that the amount of particles that someone would be exposed to from firing would be sufficient to cause any of these effects.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	% By Weight	CAS Number	EINECS/ ELINCS #
Iron	0 – 97	7439-89-6	231-096-4
Copper	50 - 65	7440-50-8	231-159-6
Zinc	15 - 32	7440-66-6	231-175-3
Nitrocellulose	2 - 13	9004-70-0	Polymer
Nitroglycerin	0.5 - 2	55-63-0	200 – 240 -8
Lead styphnate	0.1 - 1	15245–44–0	239–290-0

4. FIRST AID MEASURES

Eye Contact:	Immediately flush out fume or particles with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation develops, call a physician at once.
Skin Contact:	Wash skin with plenty of soap and water.
Inhalation:	If symptoms of lung irritation occur (coughing, wheezing or breathing difficulty), remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep affected person warm and at rest. Get medical attention.
Ingestion:	If ingested, immediately call a physician.

Medical Conditions Aggravated By Exposure:

There are no medical conditions known to be aggravated by exposure to this product in its solid form. Exposure to lead can aggravate anemia, cardiovascular and respiratory disease.

Recommendations To Physcians:
Remove from exposure, if possible, and treat symptoms

5. FIRE FIGHTING MEASURES

PROPERTY	*VALUE*
Explosive	Yes
Combustible	Not applicable
Flash Point (°C):	Not applicable
Lower Explosive Limit:	Not applicable
Upper Explosive Limit:	Not applicable

PROPERTY	*VALUE*
Flammable	Not applicable
Pyrophoric	No
Burning Rate of Material:	Not applicable
Autoignition Temp.:	No data
Flammability Classification: (defined by 29 CFR 1910.1200)	Explosive

Unusual Fire and Explosion Hazards:
Possible projection hazard.

Extinguishing Media:
Flood area with water. If no water is available, carbon dioxide, dry chemical or earth may be used.

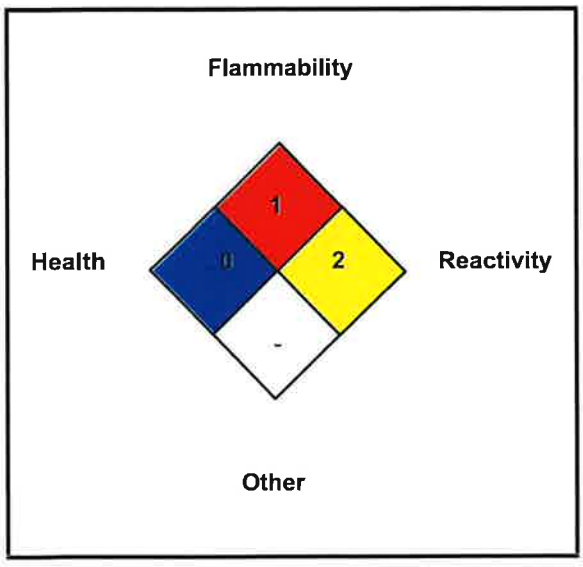
Special Firefighting Procedures:
Do not fight fire when fire reaches cargo. Cargo may explode.

Firefighters must wear self-contained breathing apparatus (SCBA) and full protective equipment. Structural firefighters' protective clothing will only provide limited protection.

Isolate materials not yet involved in the fire. Move containers from fire area if possible; otherwise, cool with carefully applied water spray.

Prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas, if practical.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HEALTH HAZARD (BLUE)	0*
FLAMMABILITY HAZARD (RED)	1
PHYSICAL HAZARD (YELLOW)	2

PROTECTIVE EQUIPMENT			
EYES	PPE CODE	RESPIRATORY	HEARING
	A	See Sect 8	See Sect 8

Hazard Scale: **0** = Minimal **1** = Slight **2** = Moderate **3** = Serious **4** = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.

Spill Response: A spill of this material will normally not require emergency response team capabilities. If, however, a large spill occurs, call 1-888-289-1911 for technical assistance.

Accidental Release Procedures: Spills of this material should be handled carefully. Do not subject materials to mechanical shock. Collect material and place in a designated, labeled waste container. See Section 13 for waste disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Use appropriate personal protective equipment (see Section 8). Workers should wash hands thoroughly after handling. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored.

Conditions for Safe Storage: Store in accordance with local regulations. Store in original containers in a cool, dry location away from Acids, Class A & B explosives, strong oxidizers, and caustics. Avoid mechanical impact or shock and electrical discharge.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

CAS #	*CHEMICAL NAME*	*ACGIH TLV*	*OSHA PEL*	*INTERNATIONAL OELS*
7439-89-6	Iron	None established	None established	None established
7440-50-8	Copper	0.2 mg/m^3 (fume), 1 mg/m^3 (dusts and mists)	0.1 mg/m^3 (fume) 1 mg/m^3 (dusts and mists)	Austria, Belgium, Canada: 0.2 mg/m^3 (fumes), 1 mg/m^3 (dusts) Denmark: 1.0 mg/m^3 (dust and powder) Germany (MAK): 0.1 mg/m^3 (fume), 1 mg/m^3 (dusts and mists)
7440-66-6	Zinc	None established	None established	None established
9004-70-0	Nitrocellulose	None established	None established	None established

55-63-0	Nitroglycerin	0.05 ppm (0.46 mg/m^3) Skin	Ceiling – 0.2 ppm (2 mg/m^3) Skin	Denmark: 0.02 ppm (0.2 mg/m^3) Norway, Sweden: 0.03 ppm (0.3 mg/m^3) Austria, Belgium, Germany, The Netherlands, Poland, Switzerland: 0.05 ppm (0.47 mg/m^3), skin Finland, France: 0.1 ppm (0.9 mg/m^3), skin U.K.: 0.2 ppm (2 mg/m^3), skin
15245-44-0	Lead styphnate	None established	None established	None established

Engineering Controls: Local exhaust ventilation is recommended if significant dusting occurs or fumes are generated. Otherwise, use general exhaust ventilation. Use explosion-proof ventilation.

Respiratory Protection: Not normally needed. Maintain airborne contaminant concentrations below guidelines listed above. Use an appropriate approved air-purifying respirator equipped with HEPA cartridges/canisters where there is the potential for exceeding established occupational exposure limits.

Eye/Face Protection: Use safety glasses.

Hand Protection: Not normally needed

Skin Protection: Not normally needed.

Hearing Protection: Not normally needed. During firing use hearing protection.

General Hygiene: Do not eat, drink, or smoke while using this product. Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	*VALUE*	*PROPERTY*	*VALUE*
Appearance:	Cylindrical brass cartridge	*Physical State:*	Solid
Odor:	None	*Odor Threshold:*	None
Boiling Point (°F):	Not applicable	*Melting point:*	Not applicable
Vapor Pressure (mm Hg):	Not applicable	*Freezing point:*	Not applicable
Vapor Density(air = 1):	Not applicable	*Bulk Density*	Not applicable
Specific gravity (g/cc):	Not applicable	*Viscosity (cps):*	Not applicable
pH:	Not applicable	*Decomposition Temperature:*	Not applicable
Solubility in Water (20 °C):	Insoluble	*Evaporation Rate:*	Not applicable
Volatiles, Percent by volume:	Not applicable	*Octanol/water partition coefficient:*	Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur

Incompatible Materials: Acids, Class A & B explosives, strong oxidizers, and caustics

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, lead oxides, carbon dioxide, lead dust/fume

Conditions to Avoid: Contact with incompatible materials. Physical damage to containers; cartridges may detonate if case is punctured.

11. TOXICOLOGICAL INFORMATION

Potential Routes of Entry: Inhalation, Skin, and by Ingestion.

The physical nature of this product makes absorption from any route unlikely. A small amount of inhalable particles may be created when cartridge is fired.

Effects Of Acute Exposure:

PRODUCT		COMPONENTS					
		Lead styphnate	Nitroglycerin	Copper	Nitrocellulose	Iron	Zinc
Inhalation LC_{50}	Particles generated from firing may be slightly toxic	No data	No data	No data	No data	No data	No data
Skin Contact LD_{50}	Skin absorption unlikely	No data	> 280 mg/kg (rabbit)	375 mg/kg, sc (rabbit)	No data	No data	No data
Ingestion LD_{50}	Ingestion unlikely	No data	105 mg/kg (rat)	3.5 mg/kg, ip (mouse)	> 5 g/kg (rat)	30 g/kg (rat)	No data

PRODUCT		COMPONENTS					
		Lead styphnate	Nitroglycerin	Copper	Nitrocellulose	Iron	Zinc
Irritation	Particles generated from firing may be slightly irritating to the eyes	No data	Mild eye and skin irritant	Respiratory irritant	No data	Eye irritant	Eye irritant
Sensitization	Sensitization to this Product has not been reported	No data	No data	No data	No data	No data	No data

Other Adverse Effects:

Target Organ Toxicity: No reported target organ toxicity from this product. Lead has caused nervous system, kidney and hematopoietic system damage in humans and laboratory animals.

Reproductive Toxicity: This product is not known or reported to cause reproductive effects. Lead has been shown to reduce male reproductive function in humans and laboratory animals.

Teratogenicity (Birth Defects): This product is not known or reported to cause developmental toxicity. Lead has been shown to affect fetal development including birth defects.

Mutagenicity: This product is not known or reported to be mutagenic. Lead has been shown to be mutagenic in several *in vitro* assays.

Carcinogenicity: IARC and US EPA list lead and lead compounds as probable human carcinogens (Group 2A) based on sufficient evidence from animal studies and limited evidence from human studies (epidemiology). NTP classifies lead and lead compounds as reasonably anticipated to be human carcinogens. Inorganic arsenic is causally associated with lung cancer via inhalation and skin cancer by ingestion. Arsenic is listed as a known human carcinogen by IARC (Group 1), OSHA, NTP and EPA

12. ECOLOGICAL INFORMATION

Environmental Effects:

PRODUCT: Product has not been tested for environmental properties.

COMPONENTS:

Copper: Copper concentrations from 0.1 to 1.0 mg/l have been found to be not toxic for most fish. However, concentrations of 0.015 to 3.0 mg/l have been reported as toxic, particularly in soft water to many kinds of fish, crustacea, mollusks, insects, and plankton.

Lead: LC 50 (48 hrs.) to bluegill is reported to be 2-5 mg/l. Lead is toxic to waterfowl.

Nitrocellulose: LC_{50} > 1000 mg/l to fish, invertebrates, and algae.

Nitroglycerin: LC_{50} = 1.228 mg/l to Bluegill, (96 hour, static)

Zinc: The following concentrations of zinc have been reported as lethal to fish: 0.13 mg/l, for 12 – 24 hours to Rainbow trout fingerlings; 1.9 – 3.6 mg/l, 6 hr TLM (soft water, 30°C) to Bluegill Sunfish; 4 mg/l, 3 days (hard water) to Rainbow trout; 1 mg/l, 24 hours (soft water) to Sticklebacks.
The presence of copper appears to have a synergistic effect on the toxicity of zinc towards fish.

Environmental Fate:

MOBILITY: Dissolved lead may migrate through soil.
PERSISTANCE/DEGRADABILITY: Not biodegradable.
BIOACCUMULATION: No data

13. DISPOSAL CONSIDERATIONS

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding the treatment, storage and disposal for hazardous and nonhazardous wastes.

14. TRANSPORT INFORMATION

Regulatory Information for US DOT, IATA, IMO, and ADR:

Proper Shipping Name	Cartridges for Tools, Blank	Cartridges, Power Device
Hazard Class Number and Description	Explosive 1.4S	Explosive 1.4S
UN Identification Number	UN0014	UN0323
Packing Group	PGII	PGII
DOT Label(s) Required	None	Explosive 1.4S

Marine Pollutant: None of the ingredients are classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B)

Additional Information:

North American Emergency Response Guidebook Number (2004): 114

U.S. DEPARTMENT OF TRANSPORTATION SHIPPING REGULATIONS: This product is classified as dangerous goods under 49 CFR 172.101. Note: May be reclassified domestically as a Limited Quantity if packaged in accordance with 49 CFR 173.63.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is classified as Dangerous Goods.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is classified as Dangerous Goods.

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is classified as Dangerous Goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is classified by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

US FEDERAL

TSCA	The components of this product are listed on the Toxic Substance Control Act inventory.				
CERCLA:	Copper, R.Q.* = 5000 lbs.; Zinc, R.Q. = 1000 lbs.; Nitroglycerin, R.Q. = 10 lbs; Lead, R.Q. = 10 lbs. (No reporting is required if diameter of the pieces of metal is equal to or exceeds 100 micrometers (0.004 inches).				
SARA 313:	Copper, Lead and Lead compounds, Nitroglycerin, Zinc (fume or dust)				
SARA 311/312:	*Health*:	Acute – No Chronic - No	*Fire*: No	*Reactivity*: Yes	*Release of Pressure*: No
SARA 302 EHS List:	None of the components of this product are listed.				

*RQ = Reportable Quantity

STATE RIGHT-TO-KNOW STATUS

Component	California	New Jersey	Pennsylvania	Massachusetts	Michigan
Iron	Not listed	Not listed	Not listed	Not listed	Not listed
Copper	Not listed	X	X	X	X
Zinc	Not listed	X	Not listed	X	X
Nitrocellulose	Not listed	X	X	X	Not listed
Nitroglycerin	Not listed	X	X	X	Not listed
Lead styphnate	X	Not listed	Not listed	X	Not listed

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65)

Warning! This product contains detectable amounts of a chemical known to the State of California to cause cancer and/or birth defects or other reproductive harm.

GHS CLASSIFICATION

Carcinogenicity Category 1A
Reproductive Toxicity Category 1A
Explosive Division 1.4
STOT RE Category 1
Aquatic Environment, Chronic II

EUROPEAN REGULATIONS

Hazard Classification

Danger Symbols:	E, T, N
Risk Phrases:	R2, R48, R60, R63, R51/53
Safety Phrases:	S2, S15, S20/21, S22, S39, S51, S61
German WGK Classification:	Not known.

CANADIAN REGULATIONS

DSL/NDSL Inventory:	The components of this product are on the DSL
IDL:	Copper, Lead
CEPA PRIORITIES LIST:	None
WHMIS:	This product is not subject to WHMIS. It is regulated as a Class 6 Explosive in Canada.

JAPANESE REGULATIONS

Existing National Inventory of Chemical Substances (ENCS): The components of this product are listed

Japanese Priority Assessment Chemical Substances: None of the components of this product are listed

OTHER INTERNATIONAL CHEMICAL INVENTORIES

Swiss Giftliste List of Toxic Substances:	All Components Listed
Australian Inventory (AICS):	All Components Listed

16. OTHER INFORMATION

REVISIONS: 08
DATE: 01/17/2022
PREPARED BY: Olin Winchester, LLC
OTHER: Additional information available from: www.winchester.com
NOTICE: THE INFORMATION IN THIS SDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. OLIN BELIEVES THIS INFORMATION TO BE RELIABLE AND CURRENT AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS.