

Safety Data Sheet

Material Name: Frac Sand, Silica Sand, and all Custom Blends

*** Section 1 - Product and Company Identification ***

Processor Information

Flat Rock Bagging
27949 Telegraph Rd.
PO Box 398
Flat Rock MI 48134

Phone: (734) 782-2073

*** Section 2 - Hazards Identification ***

THIS PRODUCT IS NOT TO BE USED FOR ABRASIVE BLASTING

GHS Classification:

Carcinogenicity - Category 1A
Specific Target Organ Toxicity - Single Exposure - Category 1
Specific Target Organ Toxicity - Repeat Exposure - Category 1

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

Danger

Hazard Statements

May cause cancer.
Causes damage to respiratory system.
Causes damage to kidneys, and/or respiratory system through prolonged or repeated exposure.

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 breathe dust/fume/gas/mist/vapors/spray.

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Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
14808-60-7	Quartz	89-99.9

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Wash immediately with plenty of water. If irritation persists, seek medical attention.

First Aid: Skin

Wash affected area with water.

First Aid: Ingestion

Not considered a likely route of exposure under normal product use conditions. If ingested, seek medical attention.

First Aid: Inhalation

Remove the person immediately to fresh air. Administer artificial respiration as needed. Seek medical attention.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Not flammable.

Hazardous Combustion Products

Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride (SiF₄).

Extinguishing Media

Use appropriate extinguishing media for surrounding fire.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

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*** Section 6 - Accidental Release Measures ***

Recovery and Neutralization

None

Materials and Methods for Clean-Up

Avoid dust generation when cleaning spills. Use water spraying/flushing or vacuum cleaning.

Emergency Measures

Isolate area. Keep unnecessary personnel away.

Personal Precautions and Protective Equipment

Wear appropriate personal protection equipment.

Environmental Precautions

None

Prevention of Secondary Hazards

None

*** Section 7 - Handling and Storage ***

Handling Procedures

This product is not to be used for abrasive blasting. Avoid dust formation. Do not breathe dust. Use adequate exhaust ventilation and dust collection. Keep airborne dust concentrations below permissible national exposure limits. Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. In case of insufficient ventilation, wear a respirator approved for silica dust when using, handling, storing or disposing of this product. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that has become dusty.

Storage Procedures

Keep containers closed and protected from damage.

Incompatibilities

Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Quartz (14808-60-7)

ACGIH: 0.025 mg/m3 TWA (respirable fraction)

OSHA: 0.1 mg/m3 TWA (respirable dust)

NIOSH: 0.05 mg/m3 TWA (respirable dust)

Engineering Measures

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: Hands

Use impervious gloves to minimize skin contact.

Personal Protective Equipment: Eyes

Use safety glasses with side shields.

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Personal Protective Equipment: Skin and Body

Wear protective clothing to minimize skin contact.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Tan/white	Odor:	None
Physical State:	Solid	pH:	NA
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	NA	Melting Point:	ND
Solubility (H2O):	Insoluble	Specific Gravity:	ND
Evaporation Rate:	ND	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	NA
Flash Point Method:	NA	Upper Flammability Limit (UFL):	NA
Lower Flammability Limit (LFL):	NA	Burning Rate:	NA
Auto Ignition:	NA		

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

None

Incompatible Products

Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.

Hazardous Decomposition Products

Silica will dissolve in hydrofluoric acid and produce the corrosive gas silicon tetrafluoride (SiF4).

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

Component Analysis - LD50/LC50

Quartz (14808-60-7)

Oral LD50 Rat 500 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

This product is not reported to have any skin irritation effects.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

This product is not reported to have any eye irritation effects.

Potential Health Effects: Ingestion

This product is not reported to have any ingestion hazards.

Potential Health Effects: Inhalation

Acute and chronic inhalation of respirable crystalline silica dust can lead to silicosis.

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Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any sensitization effects.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

May cause cancer.

B: Component Carcinogenicity

Quartz (14808-60-7)

ACGIH: A2 - Suspected Human Carcinogen

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (respirable size) (Select Carcinogen)

IARC: Monograph 100C [in preparation] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997] (Group 1 (carcinogenic to humans))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

Causes damage to respiratory system. Acute silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

Specified Target Organ General Toxicity: Repeated Exposure

Causes damage to kidneys, and/or respiratory system through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

This product is not reported to have any aspiration hazards.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

This product is not known to have ecotoxicity hazards.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

No ecotoxicity data are available for this product's components.

Persistence/Degradability

No information available for the product.

Bioaccumulation

No information available for the product.

Mobility in Soil

No information available for the product.

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* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

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

* * * Section 14 - Transportation Information * * *

DOT Information

Shipping Name: Not Regulated

* * * Section 15 - Regulatory Information * * *

Regulatory Information

US Federal Regulations

Component Analysis

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Quartz	14808-60-7	1 %

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Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Quartz	14808-60-7	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

End of Sheet