

Material Safety Data Sheet

Material Name: FLEXSAND ACTION Elastomer Coated Sand

ID: MV-002

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

Part Number: FlexSand ACTION

Chemical Name: Elastomer Coated Quartz Sand

Product Use: Infill for Synthetic Turf Applications

Manufacturer Information

Mineral Visions

Phone: 800-237-4986

11833 Ravenna Road

Chardon, OH 44024

*** Section 2 - Hazards Identification ***

Emergency Overview

This is a non-flammable, non-reactive solid. It is supplied in the form of an odorless, elastomer coated sand.

Exposure to dust may be irritating to eyes, nose, and throat.

Potential Health Effects: Eyes

Dusts from this product may be irritating to the eyes. Mechanical rubbing may increase eye irritation.

Potential Health Effects: Skin

Dusts from this product may be irritating to the skin. Mechanical rubbing may increase skin irritation. Dusts may cause a feeling of dryness on the skin.

Potential Health Effects: Ingestion

No significant adverse effects are expected upon ingestion of the product.

Potential Health Effects: Inhalation

If the dusts of this product are inhaled, it may cause irritation to the respiratory system.

HMS Ratings: Health: 1 Fire: 0 Reactivity 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

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

CAS #	Component	Percent
14808-60-7	Quartz	89-94
26221-73-8	Polyolefin	5-8
7732-18-5	Water	2-5
	Polypropylene	0.001-0.0035

Component Information/Information on Non-Hazardous Components

This is a non-combustible, non-reactive solid material.

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

First Aid: Eyes

Flush immediately with water for at least 15 minutes. Do not rub eyes. If irritation persists get medical attention.

First Aid: Skin

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion

If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation

If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention.

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

General Fire Hazards

See Section 9 for Flammability Properties.

This product is not expected to be a fire hazard. This product is rated non-explosive.

Hazardous Combustion Products

Quartz will dissolve in hydrofluoric acid and produce a corrosive gas (silicon tetrafluoride).

Extinguishing Media

Use methods for the surrounding fire.

Fire Fighting Equipment/Instructions

Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

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

Containment Procedures

Contain the discharged material.

Clean-Up Procedures

Collect spilled material in appropriate container for disposal. Use methods to minimize dust.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate protective equipment and clothing during clean-up. Regulations vary. Consult local authorities before disposal. Avoid inhalation of dust from the spilled material.

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

Handling Procedures

Avoid contact with skin and eyes. Avoid breathing dusts from this material. Stable under normal handling conditions. Not to be used for industrial use such as sand-blasting.

Storage Procedures

Store in accordance with all current regulations and standards.

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

A: 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 Controls

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

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses during normal handling.

Personal Protective Equipment: Skin

None normally required.

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Personal Protective Equipment: Respiratory

When dusts are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.

Personal Protective Equipment: General

Eye wash fountain is recommended. Use good industrial hygiene practices in handling this material.

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

Appearance:	Granules (various colors)	Odor:	Odorless
Physical State:	Solid	pH:	7.0
Vapor Pressure:	Not volatile	Vapor Density:	Not available
Boiling Point:	Not available	Melting Point:	Not available
Solubility (H2O):	Not available	Specific Gravity:	Not available
Evaporation Rate:	Not available	VOC:	None
Bulk Density:	70 lbs/cu ft.	Percent Volatile:	0%
Molecular Weight:	Not available	Octanol/H2O Coeff.:	Not available
Flash Point:	Not flammable	Flash Point Method:	Not applicable
Upper Flammability Limit (UFL):	Not available	Lower Flammability Limit (LFL):	Not available
Burning Rate:	Not applicable	Auto Ignition:	Not available

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

Chemical Stability

Stable under normal intended use.

Chemical Stability: Conditions to Avoid

None known.

Incompatibility

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

Hazardous Decomposition

Quartz will dissolve in hydrofluoric acid and produce a corrosive gas (silicon tetrafluoride).

Possibility of Hazardous Reactions

Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects

A: General Product Information

Skin and eye contact may cause irritation due to mechanical abrasion. If the dusts of this product are inhaled, it may cause irritation to the respiratory system.

B: Component Analysis - LD50/LC50

Quartz (14808-60-7)

Oral LD50 Rat: 500 mg/kg

Water (7732-18-5)

Oral LD50 Rat: >90 mL/kg

Carcinogenicity

A: General Product Information

The quartz base material (sand) was tested for levels of respirable silica, and it has been found to be significantly low.

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B: Component Carcinogenicity

Quartz (14808-60-7)

ACGIH: A2 - Suspected Human Carcinogen

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

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

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

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

Environmental Fate

No information available for the product.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

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

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not regulated as a Hazardous Material.

TDG Information

Shipping Name: Not regulated as a Hazardous Material.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: 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).

Acute Health: No **Chronic Health:** No **Fire:** No **Pressure:** No **Reactive:** No

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

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B: 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	Yes

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 %

WHMIS Classification: Not a controlled product under Canada's Workplace Hazardous Material Information System.

Additional Regulatory Information

A: General Product Information

No additional information available.

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Quartz	14808-60-7	Yes	DSL	EINECS
Polyolefin	26221-73-8	Yes	DSL	No
Water	7732-18-5	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Other Information

The information and recommendations set forth herein are taken from sources believed to be accurate as to the data hereof; however, Mineral Visions makes no warranty with respect to the accuracy of the information or the suitability of the recommendations and assures no liability to any user thereof.

Key/Legend

ACGIH: American Conference of Governmental Industrial Hygienists, A1: Confirmed human carcinogen, A2: Suspected human carcinogen, A3: Animal carcinogen, DSL: Canadian Domestic Substances List, CAS No: Chemical Abstract Service Registry Number, EEC: European Economic Community, IARC: International Agency for Research on Cancer, Group1: Carcinogenic to humans, Group2A: Probably carcinogenic to humans, Group2B: Possibly carcinogenic to humans, Group3: Unclassifiable as a carcinogen to humans, MSHA: Mine Safety and Health Administration, NIOSH: National Institute for Occupational Safety and Health, NDSL: Canadian Domestic Substances List, NTP: National Toxicology Program, N/A: Not Applicable, N/E: None Established, OSHA: Occupational Safety and Health Administration, PEL: Permissible Exposure Limit, PNOC: Particulates Not Otherwise Classified, RTK: Right To Know, STEL: Short Term Exposure Limit (15 minute Time Weighted Average), TLV: Threshold Limit Value, C: Ceiling limit, S: Skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route including mucous membranes and the eyes and by direct skin contact with the substance, WEEL: Workplace Environmental Exposure Level, WHMIS: Canadian Workplace Hazardous Materials Information System