
Section 1 - Identification of the Substance/Mixture and of the Company

1.1 Product identifier

Product Name: Mortartec Silicate

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

Recommended Use Protective Coating

1.3 Details of the Supplier of the Safety Data Sheet

Company Epoxytec Int'l Inc.
3000 N 29 CT
HOLLYWOOD, FLORIDA 33020
Telephone (General): 954-961-4656

1.4 Emergency Telephone Number

3E Company N. America/S. America (+)1.760.476.3962
Contract # 14738 Europe (+)1.760.476.3962
Asia Pacific (+)1.760.476.3960
Middle East/Africa (+)1.760.476.3959

Section 2 - Hazards Identification

2.1 Classification of the substance/mixture

Classification according to 2012 OSHA Hazard Communication Standard: 29CFR1910.1200

2.1.1 Skin corrosion/irritation	Cat. 2	Skin corrosion/irritation
2.1.2 Eye damage/irritation	Cat. 1	Serious eye damage/eye irritation
2.1.3 STOT SE (irritating to respiratory system)	Cat. 3	Specific target organ toxicity — single exposure
2.1.4 STOT RE (by inhalation)	Cat. 1	Specific target organ toxicity — repeated exposure

2.2 Labeling elements

2.2.1 Labeling according to OSHA 29CFR1910.1200 and EU (EC) 1272/2008

Signal Word: Warning

Hazard pictogram:



Hazard statements

H318 Causes serious eye damage.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H372 Causes damage to organs (Lung)
through prolonged or repeated exposure

Precautionary statements (Prevention)

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P271 Use only outdoors or in a well-ventilated area.
P260 Do not breathe dust/gas/mist/vapours.
P202 Do not handle until all safety precautions have been read and understood.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses if present and easy to do - continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for
breathing.
P303 + P361 IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash before reuse.
Precautionary Statements (Storage):
P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405
Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

Section 3 - Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
14808-60-7	>= 25.0 - < 75.0 %	Crystalline silica
65997-15-1	>= 15.0 - < 50.0 %	Cement, portland, chemicals
7778-18-9	>= 10.0 - < 20.0 %	Calcium sulphate
1305-78-8	>= 0.3 - < 3.0 %	Calcium oxide
7632-00-0	>= 0.1 - < 0.2 %	Sodium nitrite
1309-37-1	>= 0.0 - < 7.0 %	Iron oxide
1317-65-3	>= 0.0 - < 3.0 %	Limestone
1309-48-4	>= 0.0 - < 3.0 %	Magnesium oxide

Section 4 - First Aid Measures

4.1 Description of First Aid measures

General advice:

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

If inhaled:

After inhalation of dust. Keep patient calm, remove to fresh air. If difficulties occur: Obtain medical attention.

If on skin:

After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No applicable information available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons: water jet

Additional information:

Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

5.2 Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Product is not combustible or explosive.

5.3 Advice for fire fighters:

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid contact with skin and eyes. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

6.2 Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal.

For residues: Rinse with plenty of water. Avoid raising dust.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion: No special precautions necessary.

7.2 Conditions for safe storage, including any incompatibilities

Segregate from metals. Segregate from acids. Segregate from lyes. Segregate from oxidants. Segregate from foods and animal feeds.

Suitable materials for containers: Paper/Fibreboard

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

Section 8 - Exposure Controls / Personal Protection

8.1 Components with occupational exposure limits

Calcium oxide	OSHA PEL ACGIH TLV	PEL 5 mg/m ³ ; TWA value 5 mg/m ³ ; TWA value 2 mg/m ³ ;
Iron oxide	OSHA PEL ACGIH TLV	PEL 10 mg/m ³ fumes/smoke ; TWA value 10 mg/m ³ fumes/smoke ; TWA value 5 mg/m ³ Respirable fraction ;
Magnesium oxide	OSHA PEL ACGIH TLV	PEL 15 mg/m ³ Total particulate ; TWA value 10 mg/m ³ Total particulate ; TWA value 10 mg/m ³ Inhalable fraction ;
Limestone	OSHA PEL	PEL 5 mg/m ³ Respirable fraction ; PEL 15 mg/m ³ Total dust ; TWA value 15 mg/m ³ Total dust ; TWA value 5 mg/m ³ Respirable fraction
Calcium sulphate	OSHA PEL	PEL 5 mg/m ³ Respirable fraction ; PEL 15 mg/m ³ Total dust ; TWA value 15

		mg/m3 Total dust ; TWA value 5 mg/m3 Respirable fraction
Crystalline silica	ACGIH TLV OSHA PEL	TWA value 10 mg/m3 Inhalable fraction ; TWA value 2.4 millions of particles per cubic foot of air Respirable ; The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits. TWA value 0.1 mg/m3 Respirable ; The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits. TWA value 0.3 mg/m3 Total dust ; The exposure limit is calculated from the equation, $30/(\%SiO_2+2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ will yield higher exposure limits. TWA value 0.025 mg/m3 Respirable fraction
Cement, Portland, Chemicals	ACGIH TLV OSHA PEL ACGIH TLV	PEL 15 mg/m3 Total dust ; PEL 5 mg/m3 Respirable fraction ; TWA value 1 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

8.2 Personal protective equipment

8.2.1 Respiratory protection:

Breathing protection if dusts are formed.

8.2.2 Hand protection:

Chemical resistant protective gloves, Manufacturer's directions for use should be observed because of great diversity of types.

8.2.3 Eye protection:

Tightly fitting safety goggles (chemical goggles).

8.2.4 Body protection:

Body protection must be chosen based on level of activity and exposure.

8.3 General safety and hygienemeasures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary

Section 9 - Physical and Chemical Properties

Form: Odour:
Odour threshold:

Powder
Mild

Not determined due to
potential health

Colour:	Grey	Hazard by inhalation.
pH value:	13	(20 °C) (as aqueous solution)
Melting point:		
Boiling point:	> 2,000 °C	No applicable information available.
Sublimation point:		No applicable information available.
Flash point:		The substance/product is non-combustible.
Flammability:		not determined
Lower explosion limit:		
As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.		
Upper explosion limit:		
As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.		
Autoignition:		No applicable information available.
Vapour pressure:		No applicable information available.
Relative density:		No applicable information available.
Bulk density:	1.35 g/cm3	
Vapour density:		No applicable information available.
Partitioning coefficient n- octanol/water (log Pow):		No applicable information available.
Self-ignition temperature:		Not self-igniting
Viscosity, dynamic:		No data available.
Viscosity, kinematic:		No applicable information available.
Solubility in water:		(15 °C) insoluble
Miscibility with water:		Immiscible
Solubility (quantitative):		No applicable information available.
Solubility(qualitative):		No applicable information available.
Evaporation rate:		No applicable information available.

Section 10 - Stability and Reactivity

10.1 Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2 Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

10.3 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.4 Possibility of hazardous reactions

The product is stable if stored and handled as prescribed/indicated. Strong bases are formed on the addition of water.

10.5 Conditions to avoid

Avoid dust formation. Avoid humidity.

10.6 Incompatible materials

strong bases, strong acids

10.7 Hazardous decomposition products

10.8 Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Section 11 - Toxicological Information

11.1 Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

11.2 Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. The product has not been tested. The statement has been derived from the properties of the individual components.

Oral

No applicable information available.

Inhalation

No applicable information available.

Dermal

Type of value: ATE Value: > 5,000 mg/kg

Assessment other acute effects Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation. May cause severe damage to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from the properties of the individual components. Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-life is unlikely.

11.3 Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No reliable data was available concerning repeated dose toxicity. Based on available Data, the classification criteria are not met. The product has not been tested. The statement has been derived from the properties of the individual components.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Information on: crystalline silica

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosols classified by the German MAK commission as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.

NTP listed carcinogen

Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Experiences in humans

According to experience, the product is considered to be harmless to health if used in the correct manner.

11.4 Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

11.5 Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Section 12 - Ecological Information

12.1 Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product gives rise to pH shifts. Based on available Data, the classification criteria are not met.

12.2 Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

Experience shows this product to be inert and non-degradable. Elimination information not applicable

12.3 Bioaccumulative potential

Assessment bioaccumulation potential

The product will not be readily bioavailable due to its consistency and insolubility in water.

12.4 Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

12.5 Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested.

The statements on ecotoxicology have been derived from the properties of the individual components.

Section 13 - Disposal Considerations

13.1 Waste disposal of substance:

Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

13.2 Container disposal:

Completely emptied packagings can be given for recycling.

Section 14 - Transport Information

Land transport

USDOT

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

Federal Regulations

Registration status:

Chemical TSCA, US released; restriction on use / listed

This product contains an alkali metal nitrite which is subject to the SNUR at 40 CFR 721.4740 which prohibits the use of this product in metalworking fluids containing amines.

40 CFR 721.4740

EPCRA 311/312 (Hazard categories): Acute; Chronic

CERCLA RQ	CAS Number	Chemical name
5000 LBS	67-64-1; 71-36-3 79-06-1	Acetone; n-butanol; acrylamide
1000 LBS	1336-21-6; 100-41-4 100-42-5; 110-82-7	Ammonium hydroxide; ethylbenzene; Styrene; cyclohexane
100 LBS	7632-00-0; 50-00-0; 64-17-5; 75-65-0; 142-96-1; 590-01-2	Sodium nitrite; Formaldehyde; Ethanol; 2- methylpropan-2-ol; dibutyl ether; butyl propionate

Canadian WHMIS Status: D2B

Chemicals Known to the State of California to Cause Cancer or Reproductive Toxicity:

None known to be in the product at levels requiring a warning.

REACH Annex XIV (SVHC)

No listed components

REACH Annex XVII (Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles)

No listed components

REACH Status (EC 1907/2006): This material has been registered, pre-registered or is otherwise exempted from registration under the Registration, Evaluation and Authorization of Chemical Substances.

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for Details

CHEMICAL SAFETY ASSESSMENT :

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

AUSTRALIAN INFORMATION FOR PRODUCT:

This product does meet the definition of a hazardous substance or preparation as defined by the Safe Work Australia Act. Components of this product are listed on the International Chemical

Inventory list

Section 16 - Other Information

NFPA Hazard codes:

Health : 2 Fire : 0 Reactivity : 0

HMIS III rating

Health : 2 Flammability : 0 Physical Hazard : 0

Special Precautions: *The exposure limits shown for inorganic fillers are for dust exposure. They are not known to be hazardous after blended into a liquid. Wet sanding is suggested to eliminate airborne dust if product is machined or ground.*

Explanation and Disclaimer: *Each customer or recipient has to become aware of and understand the data given in this SDS and any hazards associated with the product. The information is provided in good faith and believed to be accurate; however, does not appear all inclusive and shall be used only as a guide. Regulatory requirements are subject to change and may differ between various locations, it is buyer's responsibility to ensure that comply with all state, federal or local laws. The information in this document is based on the present state of our knowledge applicable to the product with regard to safety precautions. The information presented in here relates only to the product as shipped, and it is the buyer's responsibility to determine the conditions necessary for the safe use of this product. If you have received this SDS from any source other than Epoxytec Int'l Inc. or its authorized agent, the information contained in it may have been modified from the original document.*

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END OF SDS