



BUILDING TRUST

Sika Emseal Safety Data Sheet Product Package

SJS-FP-FR

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EMSEAL Joint Systems, Ltd.

25 Bridle Lane, Westborough, MA 01581 USA www.emseal.com

Preparation Date March 15, 2015 Revision Date September 23, 2024

1. Identification of the Substance / Preparation

| Product identifier | SJS-FR |
|---------------------------|---|
| Other identifier or names | Seismic Joint System-Fire Rated, SJS-FR System |
| UN ID number | None |
| Manufacturer Address | EMSEAL LLC 111 Royal Group Cresent Woodbridge, Ontario L4H 1X9 Canada |
| Company Phone | (508) 836-0280 M-F 9am - 5pm |
| Emergency Phone | CHEMTREC (800) 424-9300 (24 Hours) |

| 2. Hazardous Indentification | |
|------------------------------|--|
| Hazardous Classification | This product is not classified as hazardous when used as intended. |
| Signal Word | None |
| Pictograms | None |
| Emergency Overview: | No emergency requirements. |

3. Composition / Information on Ingredients

SJS-FR foam is composed of polyurethane foam impregnated with a with a proprietary solid inorganic fire retardant bonded to a fully cured silicone sealant. The foam is adhered to a spline and is assembled with a metal coverplate. It is classified as Non-Hazardous.

NOTE: Silicone facing is fully cured. The composition of the silicone <u>in its liquid state</u> is comprised of the following:

| Chemical Name | CAS # | % by Weight | GHS Classification Hazard Statements |
|--|--------------------------|-------------|--|
| Polydimethyl Siloxane Diol | 70131-67-8 3 | 0.0-60.0 | SELF CLASSIFICATION Classification: Not Applicable |
| Calcium Carbonate (Limestone) Synthetic Calcium Carbonate | 1317-65-3 371-34-1 | 10.0-40.0 | SELF CLASSIFICATION Classification: Not Applicable |
| Phenyl Oximino Silane | 34036-80-1 | 1.0–5.0 | Classification: STOT RE Cat. 2, Skin Sensitization Cat. 1, Aquatic, Chronic Toxicity Cat. 3 Hazard Statement Codes: H373, H317, H412 |
| Silicon Dioxide, Fumed | 112945-52-5 | 1.0–5.0 | SELF CLASSIFICATION Classification: Not Applicable |
| Mineral Spirits | 8052-41-3 | 0.0-1.0 | Classification: Carcinogenic Cat. 1B, Mutagenic Cat. 1B, Aspiration Hazard Cat. 1 Hazard Statement Codes: H350, H340, H304 |
| Quartz | 14808-60-7 14464-46-1 | Trace | SELF CLASSIFICATION Classification: Carcinogenic Cat. 1B Hazard Statement Codes: H350 |

Water and other components.

Each of the other components is present in less than 1 percent concentration (0.1% concentration for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens).

Classification: Not Applicable



4. First Aid Measures

| 4.1 EYES: | Flush with water for at least 15 minutes, and call physician if problems persist. |
|----------------|---|
| 4.2 SKIN: | Product may leave a sticky residue, and mild irritation if prolonged exposure. Scrub with soapy water until adhesive is removed. |
| 4.3 INGESTION: | Do not eat – call physician if ingested. |

5. Fire-fighting Measures

| 5.2 FLAMMABILITY: | Slight. The material composition does not support combustion. |
|---------------------------------------|---|
| 5.2 FLASH POINT: | Unknown. |
| 5.3 AUTO-IGNITION TEMPERATURE: | Unknown. |
| 5.4 EXTINGUISHING MEDIA: | Large volumes of water, or ABC chemical may be appropriate for initial control or small volumes of impregnated foam. |
| 5.5 HAZARDOUS DECOMPOSITION PRODUCTS: | Carbon di/mon oxides will be formed as well as other noxious and toxic fumes upon combustion – do not breath combustion products. |

6. Accidental Release Measures

If material is unusable pick up pieces and dispose of in accordance with local regulations; material and all components are nontoxic and normal landfill will most often be acceptable.

7. Handling and Storage

Store in original packaging below 35°C. There are no special handling instructions.

8. Exposure Controls / Personal Protection

| 8.1 RESPIRATORY PROTECTION: | Not required |
|-----------------------------|--|
| 8.2 EYE PROTECTION: | Not required |
| 8.3 SKIN PROTECTION: | Gloves of any material are suitable if desired, but not required. No other protection is required. |

9. Physical and Chemical Properties

| 9.2 ODOR:Slight characteristic odor.9.3 PERCENT SOLIDS BY WEIGHT:100%9.4 PHYSICAL STATE:Solid9.5 PERCENT VOLATILE:<1% wt/wt9.6 DENSITY:0.4g/cm39.7 DECOMPOSITION:>300°C9.8 SOLUBILITY IN WATER:None | 9.1 APPEARANCE: | Dark grey / charcoal colored foam and colored silicone with product identifying packaging. |
|---|-------------------------------|--|
| 9.4 PHYSICAL STATE: Solid 9.5 PERCENT VOLATILE: <1% wt/wt 9.6 DENSITY: 0.4g/cm3 9.7 DECOMPOSITION: > 300°C | 9.2 ODOR: | Slight characteristic odor. |
| 9.5 PERCENT VOLATILE: <1% wt/wt 9.6 DENSITY: 0.4g/cm3 9.7 DECOMPOSITION: > 300°C | 9.3 PERCENT SOLIDS BY WEIGHT: | 100% |
| 9.6 DENSITY: 0.4g/cm3 9.7 DECOMPOSITION: > 300°C | 9.4 PHYSICAL STATE: | Solid |
| 9.7 DECOMPOSITION: > 300°C | 9.5 PERCENT VOLATILE: | <1% wt/wt |
| | 9.6 DENSITY: | 0.4g/cm3 |
| 9.8 SOLUBILITY IN WATER: None | 9.7 DECOMPOSITION: | > 300°C |
| | 9.8 SOLUBILITY IN WATER: | None |



10. Stability and Reactivity

Stable under normal conditions - avoid temperatures in excess of 300°C, strong acids and bases, and open flame.

11. Toxicological Information

Unknown.

12. Ecological Information

Unknown

13. Disposal Considerations

No known hazard. Dispose of in accordance with local regulations; material and all components are non-toxic and disposal in normal landfill will most often be acceptable.

14. Transportation Information

Not hazardous - safe for non-hazardous shipping.

15. Regulatory Information

Unknown.

16. Other Information

No other information provided.



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SECTION 1. IDENTIFICATION

| Product name | : | Northern Manufacturing Construction Grade Epoxy Part A |
|---|---|--|
| Company name | : | Sika Corporation |
| | | 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com |
| Telephone | : | (201) 933-8800 |
| Telefax | : | (201) 804-1076 |
| E-mail address | : | ehs@sika-corp.com |
| Emergency telephone | : | CHEMTREC: 800-424-9300 INTERNATIONAL: +1-703-527-3887 |
| Recommended use of the chemical and restrictions on use | : | For further information, refer to product data sheet. |

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Skin irritation | : | Category 2 |
|---|---|---------------------------------|
| Eye irritation | : | Category 2A |
| Skin sensitization | : | Category 1 |
| Carcinogenicity (Inhalation) | : | Category 1A |
| Reproductive toxicity | : | Category 1B |
| Specific target organ toxicity - single exposure | : | Category 3 (Respiratory system) |
| Specific target organ toxicity - repeated exposure | : | Category 1 (Lungs) |
| | | |

GHS label elements



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| Hazard pictograms : | |
| Signal Word : | Danger |
| Hazard Statements : | H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H350 May cause cancer by inhalation. H360 May damage fertility or the unborn child. H372 Causes damage to organs (Lungs) through prolonged or repeated exposure. |
| Precautionary Statements : | Prevention: |
| | P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe mist or vapors. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| | Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously 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. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. |
| | P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously 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. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. |



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P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labeling

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Components

| Chemical name | CAS-No. | Classification | Concentra- tion (% w/w) |
|---|------------|--|----------------------------|
| Quartz (SiO2) >5µm | 14808-60-7 | Carc. 1A; H350 STOT RE 1; H372 STOT SE 3; H335 | >= 30 - < 50 |
| bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 25068-38-6 | Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Skin Sens. 1; H317 | >= 10 - < 20 |
| oxirane, mono[(C12-14- alkyloxy)methyl]derivatives | 68609-97-2 | Skin Irrit. 2; H315 Skin Sens. 1; H317 Repr. 1B; H360 | >= 5 - < 10 |

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

| General advice | : | Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attend- ance. |
|-------------------------|---|--|
| If inhaled | : | Move to fresh air. Consult a physician after significant exposure. |
| In case of skin contact | : | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| 0/10 | | |



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|---|--|
| If swallowed : | Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention. |
| Most important symptoms : and effects, both acute and delayed | Cough Respiratory disorder Allergic reactions Excessive lachrymation Erythema Dermatitis Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause cancer by inhalation. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. irritant effects sensitizing effects toxic effects for reproduction |
| Notes to physician : | Treat symptomatically. |

SECTION 5. FIRE-FIGHTING MEASURES

| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. |
|--|---|---|
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | In the event of fire, wear self-contained breathing apparatus. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- tive equipment and emer- gency procedures | : | Use personal protective equipment. Deny access to unprotected persons. |
|---|---|--|
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform |



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| | | respective authorities. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. |
| SECTION 7. HANDLING AND ST | OR | AGE |
| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
| Advice on safe handling | : | Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Pregnant women or women of child-bearing age should not be exposed to this product. Follow standard hygiene measures when handling chemical products. |
| Conditions for safe storage | : | Store in original container. Keep in a well-ventilated place. Observe label precautions. Store in accordance with local regulations. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|--------------------|------------|--|--|----------|
| Quartz (SiO2) >5µm | 14808-60-7 | TWA (Res- pirable par- ticulate mat- ter) | 0.025 mg/m3 | ACGIH |
| | | TWA (Res- pirable dust) | 0.05 mg/m3 | OSHA Z-1 |
| | | TWA (respir- able) | 10 mg/m3 / %SiO2+2 | OSHA Z-3 |



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| TWA (respir- | 250 mppcf / | OSHA Z-3 |
|---------------|-------------|-----------|
| able) | %SiO2+5 | |
| TWA (respir- | 0.1 mg/m3 | OSHA P0 |
| able dust | - | |
| fraction) | | |
| TWA (Res- | 0.025 mg/m3 | ACGIH |
| pirable par- | (Silica) | |
| ticulate mat- | | |
| ter) | | |
| PEL (respir- | 0.05 mg/m3 | OSHA CARC |
| able) | | |
| TWA (respir- | 0.1 mg/m3 | OSHA P0 |
| able dust | | |
| fraction) | | |
| TWA (Res- | 0.025 mg/m3 | ACGIH |
| pirable par- | | |
| ticulate mat- | | |
| ter) | | |
| TWA (Res- | 0.025 mg/m3 | ACGIH |
| pirable par- | (Silica) | |
| ticulate mat- | | |
| ter) | | |

The above constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| Engineering measures : | Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use pro- cess enclosures, local exhaust ventilation or other engineer- ing controls to keep worker exposure below any recommend- ed or statutory limits. |
|-------------------------------|---|
| Personal protective equipment | |
| Respiratory protection : | Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk as- sessment indicates this is necessary. |
| | The filter class for the respirator must be suitable for the max- imum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when han- dling the product. If this concentration is exceeded, self- contained breathing apparatus must be used. |
| Hand protection : | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is nec- essary. |



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| Eye protection | : | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. |
| Skin and body protection | : | Choose body protection in relation to its type, to the concen- tration and amount of dangerous substances, and to the spe- cific work-place. |
| Hygiene measures | : | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | paste |
|---|---|---------------------|
| Color | : | white |
| Odor | : | aromatic |
| Odor Threshold | : | No data available |
| рН | : | Not applicable |
| Melting point/ range / Freez- | : | No data available |
| ing point Boiling point/boiling range | : | No data available |
| Flash point | : | > 212 °F / > 100 °C |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | 0.01 hpa |
| Relative vapor density | : | No data available |
| Density | : | 1.99 g/ml |
| Solubility(ies) | | |



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| Water solubility | : | insoluble |
|--|---|-------------------------|
| Solubility in other solvents | : | No data available |
| Partition coefficient: n- octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | > 20.5 mm2/s |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |
| Volatile organic compounds (VOC) content | : | 2.5 g/l A+B Combined |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : | No dangerous reaction known under conditions of normal use. |
|---|---|---|
| Chemical stability | : | The product is chemically stable. |
| Possibility of hazardous reac- tions | : | Stable under recommended storage conditions. |
| Conditions to avoid | : | No data available |
| Incompatible materials | : | No data available |
| Hazardous decomposition products | : | No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Components:

bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700):

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg



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|---------------|--|--------------|---------|
| Acute derm | al toxicity : LD50 Dermal (Rabbit): > 20,00 | 00 mg/kg | |
| | sion/irritation | | |
| Causes skir | n irritation. | | |
| - | e damage/eye irritation | | |
| Causes ser | ious eye irritation. | | |
| Respirator | y or skin sensitization | | |
| Skin sensi | tization | | |
| May cause | an allergic skin reaction. | | |
| Respirator | y sensitization | | |
| Not classifie | ed due to lack of data. | | |
| Germ cell ı | mutagenicity | | |
| Not classifie | ed due to lack of data. | | |
| Carcinoge | nicity | | |
| | cancer by inhalation. | | |
| IARC | Group 1: Carcinogenic to humans Quartz (SiO2) | 14808-60-7 | |
| | (Silica dust, crystalline) | | |
| | Group 2B: Possibly carcinogenic to humans | | |
| | Titanium dioxide (> 10 μm) | 13463-67-7 | |
| OSHA | OSHA specifically regulated carcinogen | | |
| | Quartz (SiO2) | 14808-60-7 | |
| | (crystalline silica) | | |
| NTP | Known to be human carcinogen | | |
| | Quartz (SiO2) | 14808-60-7 | |
| | (Silica, Crystalline (Respirable Size)) | | |
| Reproduct | ive toxicity | | |
| - | ge fertility or the unborn child. | | |
| | le exposure | | |

May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs (Lungs) through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified due to lack of data.



| Fourth on information | |
|--|---|
| Further information | |
| Product: | |
| Remarks | Titanium dioxide (13463-67-7) In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have shown to cause an increase in lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. The potential for these adverse health ef- fects appears to be closely related to the particle size and the amount of the exposed surface area that comes into contact with the lung. However, tests with other laboratory animals such as mice and hamsters, indicate that rats are significantly more susceptible to the pulmonary overload and inflammation that causes lung cancer. Epidemiological studies do not sug- gest an increased risk of cancer in humans from occupational exposure to titanium dioxide. Titanium dioxide has been char- acterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion). It has not been charac- terized as a potential carcinogen by either NTP or OSHA. |
| | posed to Quartz (silicon dioxide) in dust or powder form only, |
| TION 12. ECOLOGICAL INFO | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. |
| | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. |
| Ecotoxicity | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. |
| Ecotoxicity <u>Components:</u> | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. |
| Ecotoxicity <u>Components:</u> bisphenol-A-(epichlorhydrin) | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. |
| Ecotoxicity <u>Components:</u> bisphenol-A-(epichlorhydrin) Toxicity to fish Toxicity to daphnia and other | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. RMATION epoxy resin (number average molecular weight <= 700): : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l Exposure time: 96 h |
| Toxicity to fish Toxicity to daphnia and other aquatic invertebrates Persistence and degradabilit | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. RMATION epoxy resin (number average molecular weight <= 700): LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l Exposure time: 96 h EC50 (Daphnia magna (Water flea)): 1.8 mg/l Exposure time: 48 h |
| Ecotoxicity <u>Components:</u> bisphenol-A-(epichlorhydrin) Toxicity to fish Toxicity to daphnia and other aquatic invertebrates Persistence and degradabilit No data available | posed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. RMATION epoxy resin (number average molecular weight <= 700): LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l Exposure time: 96 h EC50 (Daphnia magna (Water flea)): 1.8 mg/l Exposure time: 48 h |
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| Other adverse effects | |
| Product: | |
| Additional ecological infor- mation | Do not empty into drains; dispose of this material and its con- tainer in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |
| SECTION 13. DISPOSAL CONSID | ERATIONS |
| Disposal methods | |
| Waste from residues | 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. |

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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TSCA list
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: All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ



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SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | Respiratory or skin sensitization Carcinogenicity Reproductive toxicity Specific target organ toxicity (single or repeated exposure) Skin corrosion or irritation Serious eye damage or eye irritation |
|----------------------|---|
| 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. |

Clean Air Act

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 including Quartz (SiO2) >5µm, which is known to the State of California to cause cancer, and Oxirane, (chloromethyl)- Epichlorohydrin, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

| Full text of other abbrevia | ations |
|-----------------------------|--------|
|-----------------------------|--------|

| ACGIH OSHA CARC OSHA P0 | : | USA. ACGIH Threshold Limit Values (TLV) OSHA Specifically Regulated Chemicals/Carcinogens USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
|-------------------------------|---|---|
| OSHA Z-1 | : | USA. Óccupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants |
| OSHA Z-3 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-3 Min- eral Dusts |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| OSHA CARC / PEL | : | Permissible exposure limit (PEL) |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| OSHA Z-3 / TWA | : | 8-hour time weighted average |
| | | |

Notes to Reader



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SECTION 1. IDENTIFICATION

| Product name | : | Northern Manufacturing Construction Grade Epoxy Part B |
|---|---|--|
| Company name | : | Sika Corporation |
| | | 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com |
| Telephone | : | (201) 933-8800 |
| Telefax | : | (201) 804-1076 |
| E-mail address | : | ehs@sika-corp.com |
| Emergency telephone | : | CHEMTREC: 800-424-9300 INTERNATIONAL: +1-703-527-3887 |
| Recommended use of the chemical and restrictions on use | : | For further information, refer to product data sheet. |

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Skin irritation | : | Category 2 |
|---|---|---------------------------------|
| Serious eye damage | : | Category 1 |
| Skin sensitization | : | Category 1 |
| Carcinogenicity (Inhalation) | : | Category 1A |
| Specific target organ toxicity - single exposure | : | Category 3 (Respiratory system) |
| Specific target organ toxicity - repeated exposure | : | Category 1 (Lungs) |

GHS label elements



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|--------------------------|--|--|
| Hazard pictograms | | |
| Signal Word | : Danger | • |
| Hazard Statements | H315 Causes skin irritation H317 May cause an allerg H318 Causes serious eye H335 May cause respirate H350 May cause cancer b H372 Causes damage to repeated exposure. | gic skin reaction. e damage. ory irritation. |
| Precautionary Statements | Prevention: | |
| | and understood. P260 Do not breathe mist P264 Wash skin thorough P270 Do not eat, drink or P271 Use only outdoors of P272 Contaminated work the workplace. | all safety precautions have been read |
| | P304 + P340 + P312 IF II and keep comfortable for doctor if you feel unwell. P305 + P351 + P338 + P3 water for several minutes. and easy to do. Continue CENTER/ doctor. P308 + P313 IF exposed attention. P333 + P313 If skin irritat attention. | 2: Wash with plenty of soap and water. NHALED: Remove person to fresh air breathing. Call a POISON CENTER/ 310 IF IN EYES: Rinse cautiously with . Remove contact lenses, if present rinsing. Immediately call a POISON or concerned: Get medical advice/ ion or rash occurs: Get medical advice/ ntaminated clothing and wash it before |
| | Storage: P403 + P233 Store in a w tightly closed. P405 Store locked up. | ell-ventilated place. Keep container |



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Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labeling

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

Other hazards

Intentional misuse by deliberate concentration and inhalation of vapor may be harmful or fatal.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Components

| Chemical name | CAS-No. | Classification | Concentra- tion (% w/w) |
|--|--------------|---|----------------------------|
| Quartz (SiO2) >5µm | 14808-60-7 | Carc. 1A; H350 STOT RE 1; H372 STOT SE 3; H335 | >= 30 - < 50 |
| N'-(3-aminopropyl)-N,N- dimethylpropane-1,3-diamine | 10563-29-8 | Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1A; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 | >= 5 - < 10 |
| Benzyl alcohol | 100-51-6 | Acute Tox. 4; H302 Eye Irrit. 2A; H319 Skin Sens. 1B; H317 | >= 5 - < 10 |
| Aliphatic Amines | Not Assigned | Skin Sens. 1; H317 | >= 1 - < 5 |

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

| General advice | : | Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attend- ance. |
|-------------------------|---|--|
| If inhaled | : | Move to fresh air. Consult a physician after significant exposure. |
| In case of skin contact | : | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician. |
| In case of eye contact | : | Small amounts splashed into eyes can cause irreversible tis- |



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|---|--|
| | sue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing. |
| If swallowed | Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention. |
| Most important symptoms and effects, both acute and delayed | irritant effects sensitizing effects Cough Respiratory disorder Allergic reactions Excessive lachrymation Erythema Dermatitis Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. May cause cancer by inhalation. Causes damage to organs through prolonged or repeated exposure. |
| Notes to physician | : Treat symptomatically. |

| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. |
|--|---|---|
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | In the event of fire, wear self-contained breathing apparatus. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- : | Use personal protective equipment. |
|---------------------------------|-------------------------------------|
| tive equipment and emer- | Deny access to unprotected persons. |



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| gency procedures | | |
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. |
| CTION 7. HANDLING AND ST | OR | AGE |
| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
| Advice on safe handling | : | Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical |

| Conditions for safe storage | : | Store in original container. Keep in a well-ventilated place. Observe label precautions. Store in accordance with local regulations. |
|-----------------------------|---|---|
| | | Store in accordance with local regulations. |

products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|--------------------|------------|--|--|----------|
| Quartz (SiO2) >5µm | 14808-60-7 | TWA (Res- pirable par- ticulate mat- ter) | 0.025 mg/m3 | ACGIH |
| | | TWA (Res- pirable dust) | 0.05 mg/m3 | OSHA Z-1 |



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| TWA (respir- | 10 mg/m3 / | OSHA Z-3 |
|---------------|-------------|-----------|
| able) | %SiO2+2 | |
| TWA (respir- | 250 mppcf / | OSHA Z-3 |
| able) | %SiO2+5 | |
| TWA (respir- | 0.1 mg/m3 | OSHA P0 |
| able dust | | |
| fraction) | | |
| TWA (Res- | 0.025 mg/m3 | ACGIH |
| pirable par- | (Silica) | |
| ticulate mat- | | |
| ter) | | |
| PEL (respir- | 0.05 mg/m3 | OSHA CARC |
| able) | _ | |
| TWA (respir- | 0.1 mg/m3 | OSHA P0 |
| able dust | | |
| fraction) | | |
| TWA (Res- | 0.025 mg/m3 | ACGIH |
| pirable par- | - | |
| ticulate mat- | | |
| ter) | | |
| TWA (Res- | 0.025 mg/m3 | ACGIH |
| pirable par- | (Silica) | |
| ticulate mat- | | |
| ter) | | |

The above constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| Engineering measures : | Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use pro- cess enclosures, local exhaust ventilation or other engineer- ing controls to keep worker exposure below any recommend- ed or statutory limits. |
|-------------------------------|---|
| Personal protective equipment | |
| Respiratory protection : | Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk as- sessment indicates this is necessary. |
| | The filter class for the respirator must be suitable for the max- imum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when han- dling the product. If this concentration is exceeded, self- contained breathing apparatus must be used. |
| Hand protection : | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is nec- |



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| | | essary. |
| Eye protection | : | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. |
| Skin and body protection | : | Choose body protection in relation to its type, to the concen- tration and amount of dangerous substances, and to the spe- cific work-place. |
| Hygiene measures | : | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : | paste |
|---|---|---------------------|
| Color | : | dark gray |
| Odor | : | amine-like |
| Odor Threshold | : | No data available |
| рН | : | 8.2 |
| Melting point/ range / Freez- | : | No data available |
| ing point Boiling point/boiling range | : | No data available |
| Flash point | : | > 212 °F / > 100 °C |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | 0.07 hpa |
| Relative vapor density | : | No data available |
| Density | : | 2.01 g/ml |
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| Solubility(ies) Water solubility | : | slightly soluble |
|--|---|-------------------------|
| Solubility in other solvents | : | No data available |
| Partition coefficient: n- octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | > 20.5 mm2/s |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |
| Volatile organic compounds (VOC) content | : | 2.5 g/l A+B Combined |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : | No dangerous reaction known under conditions of normal use. |
|---|---|---|
| Chemical stability | : | The product is chemically stable. |
| Possibility of hazardous reac- tions | : | Stable under recommended storage conditions. |
| Conditions to avoid | : | No data available |
| Incompatible materials | : | No data available |
| Hazardous decomposition products | : | No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Components:

N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine:



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|---|---|------------|--|------------------|-----------------------|
| Acute oral toxic | city | : | LD50 Oral (Rat): 1,669 mg/kg | | |
| Acute dermal to | oxicity | : | LD50 Dermal (Rat): 1,310 mg/kg | | |
| Benzyl alcoho Acute oral toxic | | : | LD50 Oral (Rat): 1,200 mg/kg | | |
| Skin corrosio r Causes skin irr | | | | | |
| Product: | | | | | |
| Method | | : | In Vitro Membrane Barrier Test Me | ethod for Skin (| Corrosion - |
| Result | | : | Irritating to skin. | | |
| Serious eye d a Causes serious | ••• | tat | on | | |
| Respiratory or | | atic | on | | |
| Skin sensitiza May cause an a | | cti | on. | | |
| Respiratory se Not classified d | | ata. | | | |
| Germ cell mut Not classified d | | ata. | | | |
| Carcinogenici | tv | | | | |
| May cause can IARC | cer by inhalatio | inc | genic to humans alline) | 14808-60-7 | |
| OSHA | OSHA specific Quartz (SiO2) (crystalline sili | | y regulated carcinogen | 14808-60-7 | |
| NTP | Quartz (SiO2) | | nan carcinogen e (Respirable Size)) | 14808-60-7 | |
| Reproductive Not classified d | - | ata | | | |
| STOT-single e | | | | | |
| May cause res | - | 1 . | | | |
| | | •• | 0/40 | | |



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STOT-repeated exposure

Causes damage to organs (Lungs) through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified due to lack of data.

Further information

Product:

Quartz (14808-60-7): This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Benzyl alcohol:

| Denzyr alconol. | |
|--|---|
| Toxicity to fish : | LC50 (Fish): > 100 mg/l Exposure time: 96 h |
| Toxicity to daphnia and other : aquatic invertebrates | EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h |
| Persistence and degradability | |
| • • | |
| No data available | |
| Bioaccumulative potential | |
| No data available | |
| | |
| Mobility in soil | |
| No data available | |
| Other adverse effects | |
| Product: | |
| Additional ecological infor- : | Do not empty into drains; dispose of this material and its con- |
| mation | tainer in a safe way. |
| | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |
| | |



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SECTION 13. DISPOSAL CONSIDERATIONS

| Disp | oosal | methods | |
|------|-------|---------|--|
| | | | |

| Waste from residues | : | 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. |
|------------------------|---|---|
| Contaminated packaging | : | Empty containers should be taken to an approved waste han- dling site for recycling or disposal. |

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR Not regulated as a dangerous good

IMDG-Code Not regulated as a dangerous good

Domestic regulation

49 CFR Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA list

: All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | Respiratory or skin sensitization Carcinogenicity Specific target organ toxicity (single or repeated exposure) Skin corrosion or irritation |
|----------------------|---|
| | |



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 Serious eye damage or eye irritation
 Serious eye damage or eye irritation

 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.

Clean Air Act

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 including Quartz (SiO2) >5µm, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

| ACGIH OSHA CARC OSHA P0 | : | USA. ACGIH Threshold Limit Values (TLV) OSHA Specifically Regulated Chemicals/Carcinogens USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
|-------------------------------|---|---|
| OSHA Z-1 | : | USA. Óccupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants |
| OSHA Z-3 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-3 Min- eral Dusts |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| OSHA CARC / PEL | : | Permissible exposure limit (PEL) |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| OSHA Z-3 / TWA | : | 8-hour time weighted average |

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Setting Bed A SAFETY DATA SHEET

Issuing Date 10-Sep-2015

Revision Date 06-Nov-2015

Revision Number 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier **Product Name** Expansion Joint Setting Bed A Other means of identification Product Code(s) SETBED A **Product Technology** Epoxy A side None FOR INDUSTRIAL USE ONLY. Restrictions on use: Do not use this product for any use other than intended **Manufacturer Address Emseal Joint** Systems, LTD 25 Bridle Lane Westborough, MA 01581 USA Company Phone Numbe: 508-836-0280 Emergency Telephone: Chemtrec 1-800-424-9300 (24 Hours)

2. Hazards Identification

Classification

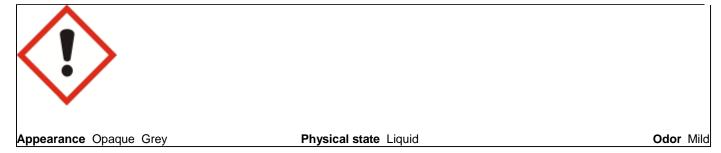
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS). This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Skin corrosion/irritation | Category 2 |
|-----------------------------------|------------|
| Serious eye damage/eye irritation | Category 2 |
| Skin sensitization | Category 1 |

Emergency Overview

WARNING

Hazard statements Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves, protective clothing, eye protection, face protection Avoid breathing dust, fumes, or vapors Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Call a POISON CENTER or doctor/physician 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 IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

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

Hazards Not Otherwise Classified (HNOC)

Other Information

Toxic to aquatic life with long lasting effects 5.00000532% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

Chemical Family Chemical nature Epoxy A Side Epoxy resin mixture.

| Chemical name | CAS No. | Weight-% | Trade secret |
|------------------------------------|------------|----------|--------------|
| Bisphenol A diglycidyl ether resin | 25068-38-6 | 70 - 100 | * |

* The exact percentage (concentration) of composition may have been withheld as a trade secret.

4. First Aid Measures

Description of first aid measures

| General advice | Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). |
|----------------|---|
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists. |

| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. | | |
|--|--|--|--|
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. | | |
| Ingestion | Not an expected route of exposure. IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting. Call a physician or Poison Control Center immediately. | | |
| Self-protection of the first aider | First Aider: Pay attention to self-protection. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | | |
| Most important symptoms and effe | cts, both acute and delayed | | |
| Symptoms | May cause allergic skin reaction. | | |
| Indication of any immediate medica | al attention and special treatment needed | | |
| Note to physicians | Treat symptomatically. | | |
| | 5. Fire-Fighting Measures | | |
| <u>Suitable Extinguishing Media</u> Foam, Dry Chemical, Carbon Dioxide | (CO2); | | |
| Unsuitable extinguishing media | Caution: Use of water spray when fighting fire may be inefficient. | | |
| Specific hazards arising from the c Cool closed containers exposed to fin for water control. | hemical e with water spray. Do not allow run-off from fire fighting to enter drains or water ways. Dike | | |
| | | | |
| Hazardous combustion products | Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. | | |
| | combustion or decomposition. See Section 10 Hazardous | | |
| Hazardous combustion products <u>Explosion data</u> Sensitivity to Mechanical Impact Sensitivity to Static Discharge | combustion or decomposition. See Section 10 Hazardous | | |
| <u>Explosion data</u> Sensitivity to Mechanical Impact Sensitivity to Static Discharge <u>Protective equipment and precauti</u> e | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. None. | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. None. | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre protective gear. | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. <u>ons for firefighters</u> athing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre protective gear. Personal precautions, protective equipment | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. <u>ons for firefighters</u> athing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full <u>6. Accidental Release Measures</u> | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre protective gear. Personal precautions, protective equipment Personal precautions | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. None. Das for firefighters Hathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full 6. Accidental Release Measures | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre protective gear. Personal precautions, protective equipment Personal precautions Other Information | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. None. Das for firefighters Hathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full 6. Accidental Release Measures Composition Products for additional information. | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre protective gear. Personal precautions, protective en Personal precautions Other Information | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. Ons for firefighters eathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full 6. Accidental Release Measures Cuipment and emergency procedures Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. | | |
| Explosion data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective equipment and precaution As in any fire, wear self-contained bre protective gear. Personal precautions, protective equipment Personal precautions Other Information For Emergency Responders | combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. None. Ons for firefighters eathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full 6. Accidental Release Measures Cuipment and emergency procedures Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. | | |

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 | | | | |
| Precautions for safe handling | | | | |
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. | | | |
| Conditions for safe storage, includ | ing any incompatibilities | | | |
| Storage Conditions | Keep containers tightly closed in a cool, well-ventilated place. Store and handle away from heat, flames and oxidizing materials. | | | |
| Incompatible materials | Acids; Bases; Strong oxidizing agents; | | | |
| | 8. Exposure Controls/Personal Protection | | | |
| Control parameters | | | | |
| Exposure Limits | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies | | | |
| Appropriate engineering controls | | | | |
| Engineering controls | Showers Eyewash stations Ventilation systems | | | |
| Individual protection measures, su | ch as personal protective equipment | | | |
| Eye/face protection | Splash Goggles. Avoid contact with eyes. | | | |
| Skin and body protection | Wear protective gloves and protective clothing. | | | |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. | | | |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. | | | |
| | 9. Physical and Chemical Properties | | | |

Information on basic physical and chemical properties

| Physical state Appearance Color | Liquid Opaque Grey | Odor Mild Odor threshold N/A | |
|---------------------------------------|--------------------------|---------------------------------|--|
| <u>Property</u> | Values | Remarks • Method | |
| рН | N/A | | |
| Melting point / freezing point | N/A | | |
| Boiling point / boiling range | > 250 °C | | |
| Flash point | > 220 °C | | |
| Evaporation rate | N/A | | |
| Flammability (solid, gas) | N/A | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | N/A | | |
| Lower flammability limit: | N/A | | |
| Vapor pressure | N/A | | |
| Vapor density | N/A | | |
| | | | |

| Relative density | 1.18 |
|------------------------------|--------------------|
| Water solubility | Negligible |
| Solubility in other solvents | N/A |
| Partition coefficient | N/A |
| Autoignition temperature | N/A |
| Decomposition temperature | N/A |
| Kinematic viscosity | N/A |
| Dynamic viscosity | N/A |
| Explosive properties | Not an explosive |
| Oxidizing properties | N/A |
| Other Information | |
| Softening point | N/A |
| Molecular weight | N/A |
| VOC Content (%) | N/A |
| Liquid Density | 9.84 pounds/gallon |
| Bulk density | N/A |
| | |

10. Stability and Reactivity

Reactivity

No data available

 Chemical stability

 Stable under recommended storage conditions.

 Possibility of hazardous reactions

 None under normal processing.

 Conditions to avoid

 Keep out of reach of children. Incompatible materials. Extremes of temperature and direct sunlight.

 Incompatible materials

 Acids; Bases; Strong oxidizing agents;

 Hazardous decomposition products

 Carbon oxides; Nitrogen oxides (NOx). Aldehydes. Aromatic hydrocarbons. May emit toxic fumes under fire conditions.

11. Toxicological Information

Information on likely routes of exposure

| Product Information | The product has not been | The product has not been tested. | | | | |
|---|----------------------------|--|---|--|--|--|
| Inhalation | Remove to fresh air. | Remove to fresh air. | | | | |
| Eye contact | Vapor may cause irritation | Vapor may cause irritation. Avoid contact with eyes. Contact with eyes may cause irritation. | | | | |
| Skin contact | | Avoid contact with skin. May cause irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. | | | | |
| Ingestion Component Information | | Not an expected route of exposure. Do NOT taste or swallow. May be harmful if swallowed. Caution - This preparation contains a substance not yet fully tested | | | | |
| Chemical name | ATEmix (oral) | ATEmix (oral) ATEmix (dermal) Inhalation LC50 | | | | |
| Bisphenol A diglycidyl ether resin 25068-38-6 | = 11400 mg/kg(Rat) | - | - | | | |

Information on toxicological effects

N/A.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Irritating to skin. Repeated or prolonged contact may cause skin irritation and dermatitis. | | | |
|---|---|--|--|--|
| erious eye damage/eye irritation Irritating to eyes. | | | | |
| ritation Irritating to eyes and skin. | | | | |
| Densitization May cause sensitization by skin contact. | | | | |
| erm cell mutagenicity N/A. | | | | |
| Carcinogenicity | IARC or NTP. | | | |
| eproductive toxicity N/A. | | | | |
| STOT - single exposure | N/A. | | | |
| STOT - repeated exposure | N/A. | | | |
| Chronic Toxicity | Repeated skin contact may lead to irritation and to sensitization, possible with cross-sensitization to other epoxies. | | | |
| Target organ effects | Eyes, Skin. | | | |
| Aspiration hazard | N/A. | | | |
| Numerical measures of toxicity - Pro | oduct Information | | | |
| Unknown acute toxicity | 5.00000532% of the mixture consists of ingredient(s) of unknown toxicity | | | |
| | based on chapter 3.1 of the GHS document | | | |
| ATEmix (oral) | 12,030.00 mg/kg mg/l | | | |
| | 12. Ecological Information | | | |
| <u>Ecotoxicity</u> | | | | |
| N/A | | | | |
| | mponent(s) of unknown hazards to the aquatic environment | | | |
| Persistence and degradability N/A | | | | |
| Other adverse effects N/A Ozone depletion potential (ODP) | N/A | | | |
| | 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 | Do not reuse container. | | | |
| | | | | |
| | | | | |
| | 14. Transport Information | | | |
| Note: | A197 - Not restricted provided that the net quantity in any receptacle does not exceed 5 Kg or 5 L and the packaging meets defined standards. | | | |
| DOT | Not regulated | | | |
| ICAO (air) | | | | |
| | | | | |
| UN/ID no. | UN3082 | | | |
| Proper shipping name | | | | |
| Froper shipping name | Environmentally Hazardous substance Liquid N.O.S. (Bisphenol A epoxy resin) | | | |
| Hazard Class | Environmentally Hazardous substance Liquid N.O.S. (Bisphenol A epoxy resin) 9 | | | |
| | | | | |

IMDG

| UN/ID no. | UN3082 |
|----------------------|--|
| Proper shipping name | Environmentally Hazardous Substance Liquid N.O.S. (Bisphenol A epoxy resin) |
| Hazard Class | 9 |
| Packing Group | III |
| Marine pollutant | This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO |

15. Regulatory Information

International Inventories

TSCA

All components of this product are either exempt or included on the TSCA Inventory in compliance with the Toxic Substances Control Act.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US 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

SARA 311/312 Hazard Categories

| Acute Health Hazard Chronic Health Hazard | Yes Yes |
|--|------------|
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

The following chemicals may be contained in this product in de minimis amounts not required for listing in section 3. However, these chemicals do appear on some state Right-to-Know (RTK) and/or other hazardous substance lists. Please check your state's listings for more information.

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical name | California Proposition 65 |
|----------------------------------|---------------------------------|
| Titanium dioxide - 13463-67-7 | Carcinogen |
| Carbon Black - 1333-86-4 | Carcinogen |
| Glycidyl phenyl ether - 122-60-1 | Carcinogen Male Reproductive |
| Epichlorohydrin - 106-89-8 | Carcinogen Male Reproductive |
| Silicon dioxide - 14808-60-7 | Carcinogen |

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. Other Information | | | | |
|---|-------------------------------------|---------------------------------|--------------------|---------------------------------------|
| <u>NFPA</u> | Health hazards 2 | Flammability 1 | Instability 0 | Physical and chemical properties - |
| <u>HMIS</u> Chronic Hazard Star Lege | Health hazards 2* end *= Chronic | Flammability 1 Health Hazard | Physical hazards 0 | Personal Protection X |
| Prepared By Issuing Date | Complian 10-Sep-20 | | | |
| Revision Date | 06-Nov-20 | 015 | | |

Revision Note

N/A

Disclaimer

The information provided in this Material 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



Setting Bed B SAFETY DATA SHEET

Issuing Date 10-Sep-2015

Revision Date 06-Nov-2015

Revision Number 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier Product Name Expansion Joint Setting Bed B Other means of identification Product Code(s) SETBED B Product Technology Epoxy B side None Curing chemical. FOR INDUSTRIAL USE ONLY. Restrictions on use: Do not use this product for any use other than intended **Manufacturer Address** Emseal Joint Systems, LTD 25 Bridle Ln Westborough, MA 01581, USA Company Phone Number 508-836-0280 Emergency Telephone Chemtrec 1-800-424-9300 (24 Hours)

2. Hazards Identification

Classification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS). This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

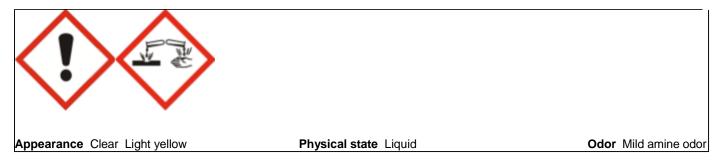
| Acute toxicity - Oral | Category 4 |
|---|---------------------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category B |
| Skin sensitization | Category 1 |

Emergency Overview

DANGER

Hazard statements

Causes severe skin burns and eye damage May cause an allergic skin reaction Harmful if inhaled Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Do not breathe dust, fumes, or vapors Wear protective gloves, protective clothing, eye protection, face protection Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician 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/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse If skin irritation or rash occurs: Get medical advice/attention 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 Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

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

Hazards Not Otherwise Classified (HNOC)

Other Information

Toxic to aquatic life with long lasting effects 72% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

Chemical Family

Epoxy B Side

| Chemical name | CAS No. | Weight-% | Trade secret |
|-------------------------------|-----------|----------|--------------|
| m-Xylylenediamine | 1477-55-0 | 15 - 30 | * |
| 1,4,7,10,13-Pentaazatridecane | 112-57-2 | 1 - 10 | * |

* The exact percentage (concentration) of composition may have been withheld as a trade secret.

4. First Aid Measures

Description of first aid measures

| General advice | Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). | |
|---|---|--|
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists. | |
| Skin contact | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician. Wash contaminated clothing before reuse. | |
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult. If symptoms persist, call a physician. | |
| Ingestion | IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting. Call a physician or Poison Control Center immediately. | |
| Self-protection of the first aider | First Aider: Pay attention to self-protection. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. | |
| Most important symptoms and effe | cts, both acute and delayed | |
| Symptoms | May cause allergic skin reaction. | |
| Indication of any immediate medica | I attention and special treatment needed | |
| Note to physicians | Treat symptomatically. | |
| | 5. Fire-Fighting Measures | |
| Suitable Extinguishing Media Foam, Dry Chemical, Carbon Dioxide | (CO2); | |
| Unsuitable extinguishing media | Caution: Use of water spray when fighting fire may be inefficient. | |
| hydrocarbons, aldehydes and soot. Th Substance will react with water (some | nemical is may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various nese may be highly dangerous if inhaled in confined spaces or at high concentration. violently) releasing flammable, toxic or corrosive gases and runoff. Cool closed containers ot allow run-off from fire fighting to enter drains or water ways. Dike for water control. | |
| Hazardous combustion products | Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See Section 10 Hazardous Decomposition Products for additional information. | |

Explosion data

Sensitivity to Mechanical ImpactNone.Sensitivity to Static DischargeNone.

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.

6. Accidental Release Measures

| Personal precautions, protective equipment and emergency procedures | | |
|---|--|--|
| Personal precautions | Ensure adequate ventilation, especially in confined areas. | |
| Other Information | Use personal protective equipment as required. | |

| For Emergency Responders | Use personal protective equipment as required. |
|---|---|
| Environmental precautions | |
| Environmental precautions | Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional Ecological Information. |
| Methods and material for containme | ent 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 |
| Precautions for safe handling | |
| | |
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. |
| Advice on safe handling Conditions for safe storage, includi | |
| C C | |

8. Exposure Controls/Personal Protection

Control parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------------------|--------------------------------|--|--------------------------------|
| m-Xylylenediamine 1477-55- | S* | (vacated) S* | Ceiling: 0.1 mg/m ³ |
| 0 | Ceiling: 0.1 mg/m ³ | (vacated) Ceiling: 0.1 mg/m ³ | |

Appropriate engineering controls

Engineering controls Showers Eyewash stations

Ventilation systems

Individual protection measures, such as personal protective equipment

| Eye/face protection | Splash Goggles. Avoid contact with eyes. |
|--------------------------------|---|
| Skin and body protection | Wear protective gloves and protective clothing. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| Physical state | Liquid | | |
|----------------|--------------|----------------|-----------------|
| Appearance | Clear | Odor | Mild amine odor |
| Color | Light yellow | Odor threshold | N/A |

| Property | Values | Remarks • Method |
|---------------------------------|--------------------|------------------|
| <u>Property</u> pH | 10.5 | Remarks • Methou |
| Melting point / freezing point | N/A | |
| Boiling point / boiling range | N/A | |
| Flash point | > 110 °C | |
| Evaporation rate | N/A | |
| Flammability (solid, gas) | N/A | |
| Flammability Limit in Air | | |
| Upper flammability limit: | N/A | |
| Lower flammability limit: | N/A | |
| Vapor pressure | N/A N/A | |
| Vapor pressure Vapor density | N/A | |
| Relative density | 0.98 | |
| Water solubility | Negligible | |
| Solubility in other solvents | N/A | |
| Partition coefficient | N/A | |
| Autoignition temperature | N/A | |
| Decomposition temperature | N/A | |
| Kinematic viscosity | 459 cSt | |
| Dynamic viscosity | 450 cps @ 25° C | |
| Explosive properties | Not an explosive | |
| Oxidizing properties | N/A | |
| 01 1 | | |
| Other Information | | |
| Softening point | N/A | |
| Molecular weight | N/A | |
| VOC Content (%) | N/A | |
| Liquid Density | 8.23 pounds/gallon | |
| Bulk density | N/A | |
| Built defibility | | |

10. Stability and Reactivity

Reactivity

No data available

 Chemical stability

 Stable under recommended storage conditions.

 Possibility of hazardous reactions

 None under normal processing.

 Conditions to avoid

 Keep out of reach of children. Avoid moisture. Incompatible materials.

 Incompatible materials

 Acids; Bases; Strong oxidizing agents;

 Hazardous decomposition products

 Carbon oxides; Nitrogen oxides (NOx). Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

11. Toxicological Information

|--|

| Product Information | The product has not been tested. |
|---------------------|---|
| Inhalation | Remove to fresh air. Harmful by inhalation. |
| Eye contact | Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness. |
| Skin contact | Avoid contact with skin. Repeated or prolonged skin contact may cause allergic reactions |

with susceptible persons. Causes burns.

Not an expected route of exposure. Do NOT taste or swallow. Harmful if swallowed.

| Component Information | Caution - This preparation | contains a substance not yet fully | tested |
|---|----------------------------|------------------------------------|----------------------|
| Chemical name | ATEmix (oral) | ATEmix (dermal) | Inhalation LC50 |
| m-Xylylenediamine 1477-55- 0 | = 1040 mg/kg (Rat) | = 2 g/kg (Rabbit) | = 2.4 mg/kg (Rat)4 h |
| 1,4,7,10,13-Pentaazatridecane 112-57-2 | = 3990 mg/kg (Rat) | = 660 µL/kg(Rabbit) | - |

Information on toxicological effects

N/A.

Ingestion

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | Irritating to skin. Repeated or prolonged contact may cause skin irritation and dermatitis. Causes burns. |
|-----------------------------------|---|
| Serious eye damage/eye irritation | Irritating to eyes. Risk of serious damage to eyes. |
| Irritation | Irritating to eyes and skin. |
| Corrosivity | Corrosive to living tissue. |
| Sensitization | May cause sensitization by skin contact. |
| Germ cell mutagenicity | N/Á. |
| Carcinogenicity | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |
| Reproductive toxicity | N/A. |
| STOT - single exposure | N/A. |
| STOT - repeated exposure | N/A. |
| Chronic Toxicity | Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. |
| Target organ effects | Eyes, Skin. |
| Aspiration hazard | N/A. |

Numerical measures of toxicity - Product Information

| Unknown acute toxicity | 72% of the mixture consists of ingredient(s) of unknown toxicity |
|-------------------------------------|--|
| The following values are calculated | based on chapter 3.1 of the GHS document |
| ATEmix (oral) | 618.00 mg/kg |
| ATEmix (dermal) | 1,702.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 0.64 mg/l |
| ATEmix (inhalation-vapor) | 445.00 mg/l |

12. Ecological Information

Ecotoxicity

N/A

94 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|-------------------------------|-------------------------------|------------------------------------|-------------------------------|
| 1,4,7,10,13-Pentaazatridecane | 2.1: 72 h Pseudokirchneriella | 420: 96 h Poecilia reticulata mg/L | 24.1: 48 h Daphnia magna mg/L |
| 112-57-2 | subcapitata mg/L EC50 | LC50 static | EC50 |

Persistence and degradability

N/A

| Chemical name | Partition coefficient |
|-------------------------------|-----------------------|
| 1,4,7,10,13-Pentaazatridecane | 1 |
| 112-57-2 | |

Other adverse effects

N/A

Ozone depletion potential (ODP) N/A

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 Do not reuse container.

14. Transport Information

| DOT | Not regulated |
|------------|---------------|
| ICAO (air) | Not regulated |
| IATA | Not regulated |
| IMDG | Not regulated |

15. Regulatory Information

International Inventories

TSCA

All components of this product are either exempt or included on the TSCA Inventory in compliance with the Toxic Substances Control Act.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

US 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

SARA 311/312 Hazard Categories

| Acute Health Hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

The following chemicals may be contained in this product in de minimis amounts not required for listing in section 3. However, these chemicals do appear on some state Right-to-Know (RTK) and/or other hazardous substance lists. Please check your state's listings for more information.

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| m-Xylylenediamine 1477-55-0 | Х | X | Х |
| 1,4,7,10,13-Pentaazatridecane 112-57-2 | Х | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| 16. Other Information | | | | |
|--|----------------------------------|----------------|--------------------|---------------------------------------|
| <u>NFPA</u> | Health hazards 2 | Flammability 1 | Instability 0 | Physical and chemical properties - |
| HMIS | Health hazards 2 | Flammability 1 | Physical hazards 0 | Personal Protection X |
| Prepared By Issuing Date Revision Date | Compliar 10-Sep-2 06-Nov-2 | 2015 | | |
| Revision Note | | | | |

N/A

Disclaimer

The information provided in this Material 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 diversity of the considered to be consider

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

Issue Date 19-Jan-2015

Revision Date 31-Jul-2015

1. IDENTIFICATION

Chemical Name or Synonym:

Crystalline Silica (Quartz), Sand, Silica Sand, Flint, Ground Silica, Fine Ground Silica, Silica Flour.

THIS PRODUCT IS A COMPONENT OF THE EMCRETE SYSTEM. IT HAS BEEN SOURCED FROM AN OEM. IT IS NOT INTENDED FOR ANY USE HEREIN OTHER THAN ITS EMCRETE APPLICATION. CONTENT IN THIS SHEET IS PROVIDED BY AND VERIFIED BY THE OEM SOURCE.

Product Identifier

Product name Crystalline Sand (Quartz) Other Means of Identification **Product Code** Crystalline Sand (Quartz) FOR INDUSTRIAL USE ONLY. This product contains isocyanates. Restrictions on use: Do not use this product for any use other than intended Manufacturer Address EMSEAL Joint Systems, Ltd. 25 Bridle Lane, Westborough, MA 01581 USA 508-836-0280 (9AM - 5PM EST) (M-F) **Company Phone Number Emergency Telephone** Chemtrec 1-800-424-9300 (24 Hours) 100

2. HAZARD(S) IDENTIFICATION

Classification:

| Physical | Health | |
|---------------|---|--|
| Not Hazardous | Carcinogen Category 1A | |
| | Specific Target Organ Toxicity – Repeated Exposure Category 1 | |



DANGER

May cause cancer by inhalation.

Causes damage to lungs through prolonged or repeated exposure by inhalation.

Response:

If exposed or concerned: Get medical advice.

Disposal:

Dispose of contents/containers in accordance with local regulation

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Do not eat, drink or smoke when using this product. Wear protective gloves and safety glasses or goggles. In case of inadequate ventilation wear respiratory protection.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Component | CAS No. | Percent |
|-----------------------------|------------|---------|
| Crystalline Silica (quartz) | 14808-60-7 | 95-99.9 |

4. FIRST-AID MEASURES

Inhalation: First aid is not generally required. If irritation develops from breathing dust, move the person from the overexposure and seek medical attention if needed.

Skin contact: First aid is not required.

Eye contact: Wash immediately with plenty of water. Do not rub eyes. If irritation persists, seek medical attention.

Ingestion: First aid is not required.

Most important symptoms/effects, acute and delayed: Particulates may cause abrasive eye injury. Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath. Prolonged inhalation of respirable crystalline silica above certain concentrations may cause lung diseases, including silicosis and lung cancer. Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is not required.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical: Product is not flammable, combustible or explosive.

Special protective equipment and precautions for fire-fighters: None required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing and respiratory protection (see Section 8). Avoid generating airborne dust during clean-up.

Environmental precautions: No specific precautions. Report releases to regulatory authorities if required by local, state and federal regulations.

Methods and materials for containment and cleaning up: Avoid dry sweeping. Do not use compressed air to clean spilled sand or ground silica. Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system, or wet before sweeping. Dispose of in closed containers.

7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid generating dust. Do not breathe dust. 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. Use adequate exhaust

ventilation and dust collection to reduce respirable crystalline silica dust levels to below the permissible exposure limit ("PEL"). Maintain and test ventilation and dust collection equipment. Use all available work practices to control dust exposures, such as water sprays. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Keep airborne dust concentrations below permissible exposure limits.

Where necessary to reduce exposures below the PEL or other applicable limit (if lower than the PEL), wear a respirator approved for silica containing dust when using, handling, storing or disposing of this product or bag. See Section 8, for further information on respirators. Do not alter the respirator. Do not wear a tight-fitting respirator with facial hair such as a beard or mustache that prevents a good face to face piece seal between the respirator and face. Maintain, clean, and fit test respirators in accordance with applicable standards. Wash or vacuum clothing that has become dusty.

Participate in training, exposure monitoring, and health surveillance programs to monitor any potential adverse health effects that may be caused by breathing respirable crystalline silica. The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community "right-to-know" laws and regulations should be strictly followed.

Conditions for safe storage, including any incompatibilities: Use dust collection to trap dust produced during loading and unloading. Keep containers closed and store bags to avoid accidental tearing, breaking, or bursting.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

| Component | OSHA PEL | ACGIH TLV | NIOSH REL |
|-----------------------------|--|--------------------------------------|-------------------------------------|
| Crystalline Silica (quartz) | $ \begin{array}{r} 10 \text{ mg/m3} \\ \%SiO_2 + 2 \text{ TWA} \\ (respirable dust) \\ \underline{30 \text{ mg/m3}} \\ \%SiO_2 + 2 \text{ TWA} \\ (total dust) \end{array} $ | 0.025 mg/m3 TWA (respirable dust) | 0.05 mg/m3 TWA (respirable dust) |

If crystalline silica (quartz) is heated to more than 870°C, quartz can change to a form of crystalline silica known as tridymite; if crystalline silica (quartz) is heated to more than 1470°C, quartz can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as tridymite or cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

Appropriate engineering controls: Use adequate general or local exhaust ventilation to maintain concentrations in the workplace below the applicable exposure limits listed above.

Respiratory protection: If it is not possible to reduce airborne exposure levels to below the OSHA PEL or other applicable limit with ventilation, use the table below to assist you in selecting respirators that will reduce personal exposures to below the OSHA PEL. This table is part of the NIOSH Respirator Selection Logic, 2004, Chapter III, Table 1, "Particulate Respirators". The full document can be found at www.cdc.gov/niosh/npptl/topics/respirators; the user of this MSDS is directed to that site for information concerning respirator selection and use. The assigned protection factor (APF) is the maximum anticipated level

of protection provided by each type of respirator worn in accordance with an adequate respiratory protection program. For example, an APF of 10 means that the respirator should reduce the airborne concentration of a particulate by a factor of 10, so that if the workplace concentration of a particulate was 150 ug/m3, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 ug/m3. In using chemical cartridges, consideration must be given to selection of the correct cartridge for the chemical exposure and the maximum use concentration for the cartridge. In additional a cartridge change-out schedule must be developed based on the concentrations in the workplace.

| Assigned protection factor ¹ | Type of Respirator (Use only NIOSH-certified respirators) |
|--|---|
| 10 | Any air-purifying elastomeric half-mask respirator equipped with appropriate type of particulate filter. ² Appropriate filtering facepiece respirator. ^{2,3} Any air-purifying full facepiece respirator equipped with appropriate type of particulate filter. ² Any negative pressure (demand) supplied-air respirator equipped with a half-mask. |
| 25 | Any powered air-purifying respirator equipped with a hood or helmet and a high efficiency (HEPA) filter. Any continuous flow supplied-air respirator equipped with a hood or helmet. |
| 50 | Any air-purifying full facepiece respirator equipped with N-100, R-100, or P-100 filter(s). Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and a high-efficiency filter. Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece. |
| 1,000 | pressure-demand supplied-air respirator equipped with a half-mask. |

requirements (such as the ones required by OSHA in 29CFR1910.134), (2) the use of NIOSH-certified respirators in their approved configuration, and (3) individual fit testing to rule out those respirators that cannot achieve a good fit on individual workers.

2. Appropriate means that the filter medium will provide protection against the particulate in question.

3. An APF of 10 can only be achieved if the respirator is qualitatively or quantitatively fit tested on individual workers.

Skin protection: Maintain good industrial hygiene. Protection recommended for workers suffering from dermatitis or sensitive skin.

Eye protection: Safety glasses with side shields or goggles recommended if eye contact is anticipated.

Other: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): White or tan sand: granular, crushed or ground to a powder. Odor: None.

| Odor threshold: Not determined | pH: 6-8 |
|---|-------------------------------------|
| Melting point/freezing point: 3110°F/1710°C | Boiling point/range: 4046°F/2230°C |
| Flash point: Not applicable | Evaporation rate: Not applicable |
| Flammable limits: LEL: Not applicable | UEL: Not applicable |
| Vapor pressure: Not applicable | Vapor density: Not applicable |
| Relative density: 2.65 | Solubility(ies): Insoluble in water |

| Partition coefficient: n-octanol/water: Not applicable | Auto-ignition temperature: Not determined |
|--|---|
| Decomposition temperature: Not determined | Viscosity: Not applicable |
| Flammability (solid, gas): Not applicable | |

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical stability: Stable

Possibility of hazardous reactions: Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.

Conditions to avoid: Avoid generation of dust in handling and use.

Incompatible materials: Powerful oxidizers such as fluorine, chlorine trifluoride, and oxygen difluoride and hydrofluoric acid.

Hazardous decomposition products: Silica will dissolve in hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

11. TOXICOLOGICAL INFORMATION

Acute effects of exposure:

Inhalation: Inhalation of dust may cause respiratory tract irritation. Symptoms of exposure may include cough, sore throat, nasal congestion, sneezing, wheezing and shortness of breath.

Ingestion: Ingestion in an unlikely route of exposure. If dust is swallowed, it may irritate the mouth and throat. **Skin contact:** No adverse effects are expected.

Eye contact: Particulates may cause abrasive injury.

Chronic effects: Prolonged inhalation of respirable crystalline silica may cause lung disease, silicosis, lung cancer and other effects as indicated below.

The method of exposure that can lead to the adverse health effects described below is inhalation.

A. SILICOSIS

Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute:

<u>Chronic or Ordinary Silicosis</u> is the most common form of silicosis, and can occur after many years (10 to 20 or more) of prolonged repeated inhalation of relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Complicated silicosis or PMF symptoms, if present, are shortness of breath and cough. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pumonale).

<u>Accelerated Silicosis</u> can occur with prolonged repeated inhalation of high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except

that lung lesions appear earlier and progression is more rapid.

<u>Acute Silicosis</u> can occur after the repeated inhalation of very high concentrations of respirable crystalline silica over a short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough, weakness and weight loss. Acute silicosis is fatal.

B. CANCER

IARC - The International Agency for Research on Cancer ("IARC") concluded that "crystalline silica in the form of quartz or cristobalite dust is *carcinogenic to humans (Group 1)*". For further information on the IARC evaluation, see <u>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans</u>, Volume 100C, "A Review of Human Carcinogens: Arsenic, Metals, Fibres and Dusts " (2011).

NTP classifies "Silica, Crystalline (respirable size)" as Known to be a human carcinogen.

C. AUTOIMMUNE DISEASES

Several studies have reported excess cases of several autoimmune disorders -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.

D. TUBERCULOSIS

Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to tuberculosis bacteria. Individuals with chronic silicosis have a three-fold higher risk of contracting tuberculosis than similar individuals without silicosis.

E. KIDNEY DISEASE

Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silicaexposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

F. NON-MALIGNANT RESPIRATORY DISEASES

The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airways disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exist only with underlying silicosis, only among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

Sources of information:

The NIOSH Hazard Review - Occupational Effects of Occupational Exposure to Respirable

Crystalline Silica published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH - Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or through the NIOSH web site, www.cdc.gov/niosh/topics/silica, then click on the link "NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica".

For a more recent review of the health effects of respirable crystalline silica, the reader may consult *Fishman's Pulmonary Diseases and Disorders*, Fourth Edition, Chapter 57. "Coal Workers' Lung Diseases and Silicosis".

Finally, the US Occupational Safety and Health Administration (OSHA) published a summary of respirable crystalline silica health effects in connection with OSHA's Proposed Rule regarding occupational exposure to

respirable crystalline silica. The summary was published in the September 12, 2013 Federal Register, which can be found at <u>www.federalregister.gov/articles/2013/09/12/2013-20997/occupational-exposure-to-respirable-crystalline-silica</u>.

Numerical measures of toxicity:

Crystalline Silica (quartz): LD50 oral rat>22,500 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity: Crystalline silica (quartz) is not known to be ecotoxic. Persistence and degradability: Silica is not degradable. Bioaccumulative potential: Silica is not bioaccumulative. Mobility in soil: Silica is not mobile in soil. Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Discard any product, residue, disposable container or liner in full compliance with national regulations.

14. TRANSPORT INFORMATION

UN number: None UN proper shipping name: Not regulated Transport hazard classes(es): None Packing group, if applicable: None Environmental hazards: None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not determined Special precautions: None known.

15. REGULATORY INFORMATION

UNITED STATES (FEDERAL AND STATE)

<u>TSCA</u> Status: Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7.

<u>RCRA</u>: This product is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

<u>CERCLA</u>: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

Emergency Planning and Community Right to Know Act (SARA Title III): This product contains the following chemicals subject to SARA 302 or SARA 313 reporting: None above the de minimus concentrations.

<u>Clean Air Act</u>: Crystalline silica (quartz) mined and processed is not processed with or does not contain any Class I or Class II ozone depleting substances.

<u>FDA:</u> Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

<u>California Proposition 65</u>: Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen.

<u>California Inhalation Reference Exposure Level (REL)</u>: California established a chronic non-cancer effect REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no non-cancer health effects are anticipated in individuals indefinitely exposed to the substance at that level.

Massachusetts Toxic Use Reduction Act: Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

<u>Pennsylvania Worker and Community Right to Know Act</u>: Quartz is a hazardous substance under the Act, but it is not a special hazardous substance or an environmental hazardous substance.

<u>Texas Commission on Environmental Quality</u>: The Texas CEQ has established chronic and acute Reference Values and short term and long term Effects Screening Levels for crystalline silica (quartz). The information can be accessed through <u>www.tceq.texas.gov</u>.

CANADA

Domestic Substances List: U. S. Silica Company products, as naturally occurring substances, are on the Canadian DSL.

WHMIS Classification: D2A

OTHER NATIONAL INVENTORIES

Australian Inventory of Chemical Substances (AICS): All of the components of this product are listed on the AICS inventory or exempt from notification requirements.

China: Silica is listed on the IECSC inventory or exempt from notification requirements.

Japan Ministry of International Trade and Industry (MITI): All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law Registry Number 1-548.

Korea Existing Chemicals Inventory (KECI) (set up under the Toxic Chemical Control Law): Listed on the ECL with registry number 9212-5667.

New Zealand: Silica is listed on the HSNO inventory or exempt from notification requirements.

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed for PICCS.

Taiwan: Silica is listed on the CSNN inventory or exempt from notification requirements.

16. OTHER INFORMATION

Date of preparation/revision: February 10, 2015

Hazardous Material Information System (HMIS):

Health * Flammability 0 Physical Hazard 0 Protective Equipment E * For further information on health effects, see Sections 2, 8 and 11 of this MSDS.

National Fire Protection Association (NFPA):

Health 0 Flammability 0 Instability 0

Web Sites with Information about Effects of Crystalline Silica Exposure:

The U.S. National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA) maintain sites with information about crystalline silica and its potential health effects. For NIOSH, http://www.cdc.gov/niosh/topics/silica; for OSHA, http://www.osha.gov/dsg/topics/silicacrystalline/index.

The IARC Monograph that includes crystalline silica, Volume 100C, can be accessed in PDF form at the IARC web site, <u>http://monographs.iarc.fr/ENG/Monographs/PDFs/index.php</u>.

Company Disclaimer

The information and recommendations contained herein are based upon data believed to be up todate and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by purchase, resale, use or exposure to our silica. Customers and users of silica must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391 and 98/24.



Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, the Korean ISHA (Notice 2009-68), the Japanese Industrial Standard JIS Z 7250: 2000, Mexican NOM018-STPS 2000, SPRING Singapore, and the Global Harmonization Standard

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

IDENTIFICATION OF THE MIXTURE TRADE/MATERIAL NAME: RELEVANT USE of the SUBSTANCE: USES ADVISED AGAINST: SUPPLIER/MANUFACTURER'S NAME: Address:

Firestop and Sound Transmission None Specified Technologies Inc. 210 Evans Way, Somerville, New Jersey 08876 (908) 526-8000 (8:00am to 5:00pm Eastern Standard Time) U.S., Canada: 1-800-255-3924 (24 hrs)

SpecSeal[®] LCI Intumescent Sealant

International: +1-813-248-0585 (collect-24 hrs)

Business Phone: Emergency Phone:

EMAIL of Competent Person for Information on SDS: techserv@stifirestop.com

NOTE: ALL United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, Canadian WHMIS [Controlled Products Regulations], Mexican NOM018-STPS 2000, SPRING Singapore, and Japanese JIS Z7250 required information is included in appropriate sections based on the U.S. ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the countries listed above.

2. HAZARD IDENTIFICATION

<u>GLOBAL HARMONIZATION AND JAPANESE JIS Z7253 LABELING AND CLASSIFICATION</u>: This product has been classified per UN GHS Standards under U.S., Japanese and other applicable regulations that require Global Harmonization compliance.

<u>Classification</u>: Carcinogenic Category 2, Eye Irritation Category 2A, Specific Target Organ Toxicity (Inhalation-Respiratory Irritation) Single Exposure Category 3

Signal Word: Warning

<u>Hazard Statements</u>: H351: This product contains trace amounts of a suspected human carcinogen by inhalation: however, this hazard is not expected to be significant due to viscosity and consistency of the mixture.

H319: Causes serious eye irritation. H335: May cause respiratory irritation.

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 vapors, fume. P271: Use only in a well-ventilated area. P280: Wear protective gloves, clothing, eye protection and face protection. P284: Wear respiratory protection.

Response: P308 + P313: IF exposed or concerned: Get medical advice/attention. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. P337 + P313: If eye irritation persists: Get medical advice/attention. P304 + P340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. P312: Call a POISON CENTER or doctor if you feel unwell. P321: Specific treatment (remove from exposure and treat symptoms). Storage: P403 + P233 + P405: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: P501: Dispose of contents/containers in accordance with all local, regional, national and international regulations.

Hazard Symbols: GHS07, GHS08



KOREAN ISHA (Notice 2009-68) LABELING AND CLASSIFICATION: Classified in accordance with ISHA Notice 2009-68. Under ISHA, no differences in classification are applicable.

3. COMPOSITION and INFORMATION ON INGREDIENTS

Hazardous Components:

| Chemical Name | CAS# | Chinese IECSC Inventory | Japanese ENCS # | Korean ECL # | Taiwan NESCI ECS | WT% | LABEL ELEMENTS GHS & Japanese JIS Z7253 Classification Korean ISHA Classification GHS Hazard Codes |
|--|------------|----------------------------|-----------------|--------------|------------------------|----------|--|
| Aluminum Trihydrate | 21645-51-2 | Listed | 1-17 | KE-00980 | | 15-25% | SELF CLASSIFICATION GHS & JAPANESE JIS Z7253, KOREAN ISHA: Classification: Eye Irritation Cat. 2A Hazard Codes: H319 |
| Sulfuric Acid Compound with Graphite | 12777-87-6 | Not Listed | Not Listed | KE-32585 | | 2-5% | SELF CLASSIFICATION GHS & JAPANESE JIS Z7253, KOREAN ISHA: Classification: Carcinogenic Cat. 2 Hazard Codes: H351i |
| Crystalline Silica | 14808-60-7 | Listed | 1-548 | KE-29983 | | 0.1-0.2% | SELF CLASSIFICATION GHS & JAPANESE JIS Z7253, KOREAN ISHA: Classification: Carcinogenic Cat. 1, STOT (Inhalation-Lungs) RE Cat. 2 Hazard Statement Codes: H350, H373 |

4. FIRST-AID MEASURES

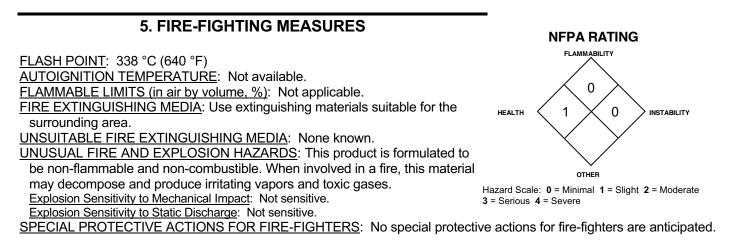
Skin Exposure: If adverse skin effects occur, discontinue use and flush contaminated area. Seek medical attention if adverse effect occurs after flushing.

Inhalation: If fumes or vapors are inhaled, remove victim to fresh air.

Eye Exposure: If this product contaminates the eyes, rinse eyes under gently running water.

Ingestion: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, DO NOT INDUCE VOMITING.

<u>MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE</u>: Pre-existing respiratory disorders may be aggravated by overexposures to this product.



6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Proper protective equipment should be used.

Small Spills: Wear rubber gloves, safety glasses.

Large Spills: Minimum Personal Protection Equipment should be rubber gloves.

METHODS FOR CLEAN-UP AND CONTAINMENT: Spills of this product present minimal hazard.

Small Spills: Small releases can be carefully swept up or cleaned up using a damp sponge or polypads.

Large Spills: Access to the spill area should be restricted. For large spills, dike or otherwise contain spill and sweep-up or vacuum with non-sparking vacuum.

<u>All Spills</u>: Place all spill residue in a double plastic bag or other containment and seal. Close off sewers and take other measures to protect human health and the environment as necessary. Rinse area with soap and water solution and follow with a water rinse. Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

<u>ENVIRONMENTAL PRECAUTIONS</u>: Avoid release to the environment. Run-off water may be contaminated by other materials and should be contained to prevent possible environmental damage.

7. HANDLING and USE

<u>PRECAUTIONS FOR SAFE HANDLING</u>: As with all chemicals, avoid getting this material ON YOU or IN YOU. Do not eat, drink, smoke, or apply cosmetics while handling this product. Wash hands thoroughly after handling this product or containers of this product. Avoid breathing fumes or vapors generated by this product. Use in a well-ventilated location. <u>CONDITIONS FOR SAFE STORAGE</u>: Store containers in a cool, dry location, away from direct sunlight, sources of intense heat. Do not store above 55°C (131°F)

SPECIFIC END USE(S): This product is for use as a sealant. Follow all industry standards for use of this product.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

<u>Ventilation and Engineering Controls</u>: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below (if applicable). Exhaust directly to the outside, taking necessary precautions for environmental protection. <u>Workplace Exposure Limits/Control Parameters</u>:

| CHEMICAL | CAS # | | EXPOSURE LIMITS IN AIR | | | | | | |
|--|------------|----------------------------|---------------------------|--|---------------------------|--------------------------|---------------------------|---------------------------|--|
| NAME | | ACGIH-TLVs | | OSHA-PELs | | NIOSH-RELs | | NIOSH | OTHER |
| | | TWA mg/m ³ | STEL mg/m ³ | TWA mg/m ³ | STEL mg/m ³ | TWA mg/m ³ | STEL mg/m ³ | IDLH mg/m ³ | mg/m ³ |
| Aluminum Trihydrate | 21645-51-2 | NE | NE | NE | NE | NE | NE | NE | DFG MAKs: TWA = 4 mg/m ³ (inhalable fraction); 1.5 mg/m ³ (respirable fraction) DFG MAK Pregnancy Risk Classification: D |
| Crystalline Silica (Quartz) | 14808-60-7 | 0.025 (resp. fract.) | NE | 0.05 mg/m ³ (resp. dust) | NE | 0.05 (resp. dust) | NE | 50 | Carcinogen: IARC-1, MAK-1 (respirable fraction), NOSH-Ca, NTP- K (respirable fraction), TLV-A2 |
| Sulfuric Acid Compound with Graphite | 12777-87-6 | NE | NE | NE | NE | NE | NE | NE | NE |

NE = Not Established. See Section 16 for Definitions of Other Terms Used

<u>PROTECTIVE EQUIPMENT</u>: The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including U.S. Federal OSHA Respiratory Protection (29 CFR 1910.134), OSHA Eye Protection 29 CFR 1910.133, OSHA Hard Protection 29 CFR 1910.138, OSHA Foot Protection 29 CFR 1910.136 and OSHA Body Protection 29 CFR1910.132), equivalent standards of Canada (including CSA Respiratory Standard Z94.4-02, Z94.3-M1982, Industrial Eye and Face Protectors and CSA Standard Z195-02, Protective Footwear), or standards of Japan (including JIS T 8116:2005 for glove selection, JIS T 8150:2006 for respiratory PPE, JIS T 8147:2003 for eye protectors, and JIS T 8030:2005 for protective clothing). Please reference applicable regulations and standards for relevant details.

<u>Respiratory Protection</u>: Maintain airborne contaminant concentrations below exposure limits listed above. For materials without listed exposure limits, minimize respiratory exposure. If necessary, use only respiratory protection authorized under appropriate regulations. <u>Eye Protection</u>: Wear splash goggles or safety glasses as appropriate for the task.

Hand Protection: Wash hands and wrists before putting on and after removing gloves. During manufacture or other similar operations, wear the appropriate hand protection for the process.

Skin Protection: Use appropriate protective clothing for the task (e.g., lab coat, etc.). If necessary, refer to the U.S. OSHA Technical Manual (Section VII: Personal Protective Equipment) or other appropriate regulations.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Paste. COLOR: Red MOLECULAR FORMULA: Mixture. MOLECULAR WEIGHT: Mixture. ODOR THRESHOLD: Not available. ODOR: Mild acrylic. OXIDIZING PROPERTIES: Not applicable. FLAMMABLE LIMITS (in air by volume, %): Not applicable. PERCENT VOLATILE: 22 DECOMPOSITION TEMPERATURE: Not available. FLASH POINT: Not available. AUTOIGNITION TEMPERATURE: Not available. FREEZING/MELTING POINT: Not available. BOILING POINT: > 100°C (> 212°F) VAPOR PRESSURE: Not available. SPECIFIC GRAVITY (water = 1): 1.38 CARB VOC: 0.2.29 wt % (calc.) VAPOR DENSITY (air = 1): Not available. EVAPORATION RATE (n-BuAc = 1): > 1 VOC (U.S. EPA Method 24): 26 gm/L SOLUBILITY IN SOLVENTS: Not available. SOLUBILITY IN WATER: Insoluble. COEFFICIENT WATER/OIL DISTRIBUTION: Not established. pH: Not available. HOW TO DETECT THIS SUBSTANCE (warning properties in event of accidental release): The appearance may be characteristics to distinguish a release of this product.

10. STABILITY and REACTIVITY

<u>CHEMICAL STABILITY</u>: This product is stable when properly stored at normal temperature and pressures (see Section 7, Handling and Storage).

<u>DECOMPOSITION PRODUCTS</u>: Combustion: If exposed to extremely high temperatures, thermal decomposition may generate irritating fumes and toxic gases (e.g., aluminum, calcium, carbon, and sulfur oxides, and acrylic monomers). Hydrolysis: None known.

<u>MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE</u>: This product is incompatible with strong oxidizers. POSSIBILITY OF HAZARDOUS POLYMERIZATION OR REACTION: Will not occur.

CONDITIONS TO AVOID: Avoid exposure to or contact with extreme temperatures and incompatible chemicals.

11. TOXICOLOGICAL INFORMATION

Inhalation: Inhalation of fumes or vapors may cause irritation of the nose, throat, and lungs and cause coughing. Removal to fresh air should relieve symptoms. The trace Crystalline Silica component is a known human carcinogen. Due to the form of this product, this hazard is not as significant as a powdered or solid products, however, all inhalation exposure must be avoided in order to mitigate carcinogenic potential.

<u>Contact with Skin or Eyes</u>: Direct eye contact may cause irritation, redness, and tearing from mechanical irritation. Prolonged or repeated skin exposures may cause dermatitis (dry red skin).

Skin Absorption: Components are not known to be absorbed through intact skin.

Ingestion: Ingestion is not a significant route of occupational exposure and is unlikely to occur.

<u>Injection</u>: Accidental injection of this product, via laceration or puncture by a contaminated object can cause redness at the site of injection.

<u>HEALTH EFFECTS OR RISKS FROM EXPOSURE</u>: Exposure to this product may cause the following health effects:

<u>Acute</u>: Inhalation of fumes or vapors may cause irritation of respiratory system. Eye contact may cause mechanical irritation.

<u>Chronic</u>: Prolonged or repeated skin exposure may cause dermatitis (dry red skin). This product contains trace amounts of a suspected human carcinogen by inhalation: however, this hazard is not expected to be significant due to the viscosity and consistency of the mixture.

TARGET ORGANS: Acute: Skin, eyes, respiratory system. Chronic: Skin. not otherwise specified

| HAZARDO | US MATERIAL | IDENTIFICATIO | ON SYSTEM | | | | |
|--|-----------------------------|---------------|-----------|--|--|--|--|
| HEALTH HAZARD (BLUE) 1* | | | | | | | |
| FLAMMABILITY HAZARD (RED) 0 | | | | | | | |
| PHYSICAL HAZARD (YELLOW) 0 | | | | | | | |
| PROTECTIVE EQUIPMENT | | | | | | | |
| EYES | RESPIRATORY | HANDS | BODY | | | | |
| B | SEE SECTION 8 SEE SECTION 8 | | | | | | |
| For Routine Industrial Use and Handling Applications | | | | | | | |

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

<u>IRRITANCY OF PRODUCT</u>: Inhalation of fumes or vapors may cause respiratory irritation. Eye contact may cause irritation. Prolonged skin contact may cause irritation.

SENSITIZATION OF PRODUCT: This product is not currently known to cause allergic skin or respiratory reaction.

CARCINOGENIC POTENTIAL OF COMPONENTS: Components of this product are listed by agencies tracking the carcinogenic potential of chemical compounds, as follows:

CRYSTALLINE SILICA: ACGIH-TLV-A2 (Suspected Human Carcinogen); IARC-1 (Carcinogenic to Humans); MAK-1 (Substances that Cause Cancer in Man and Can Be Assumed to Make a Significant Contribution to Cancer Risk); NIOSH-Ca (Potential Occupational Carcinogen with No Further Categorization); NTP-K (Known to Be a Human Carcinogen)

The remaining components are not found on the following lists: U.S. EPA, U.S. NTP, U.S. OSHA, U.S. NIOSH, GERMAN MAK, IARC, or ACGIH and therefore is neither considered to be nor suspected to be a cancer-causing agent by these agencies.

<u>REPRODUCTIVE TOXICITY INFORMATION</u>: Components of this product have no reported mutagenic, embryotoxic, teratogenic or reproductive toxicity.

ACGIH BIOLOGICAL EXPOSURE INDICES (BEIs): Currently, there are no ACGIH Biological Exposure Indices (BEIs) determined for this material.

DEGREE OF EFFECT TO THE HEALTH OF THE POLLUTING AGENT OF ENVIRONMENT OF WORK (per Mexican NOM-010 STPS-1999): 0

12. ECOLOGICAL INFORMATION

MOBILITY: This product has not been tested for mobility in soil.

<u>PERSISTENCE AND BIODEGRADABILITY</u>: This product has not been tested for persistence or biodegradability. The mineral components are not expected to biodegrade to great extent.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All releases to terrestrial, atmospheric and aquatic environments should be avoided.

OTHER ADVERSE EFFECTS: This material is not listed as having ozone depletion potential.

<u>ENVIRONMENTAL EXPOSURE CONTROLS</u>: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

13. DISPOSAL CONSIDERATIONS

<u>DISPOSAL METHODS</u>: It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. <u>DISPOSAL CONTAINERS</u>: Waste materials must be placed in and shipped in appropriate 5-gallon or 55-gallon poly or metal waste pails or drums. <u>PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING</u>: Wear proper protective equipment when handling waste materials.

U.S. EPA WASTE NUMBER: Not applicable.

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as dangerous goods under rules of IATA.

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.

OFFICIAL MEXICAN STANDARD; REGULATION FOR THE TRANSPORT OF DANGEROUS GOODS AND RESIDUES: This product is not classified as Dangerous Goods, per transport regulations of Mexico.

<u>SINGAPORE STANDARD 286: PART A</u>: This product has no requirements under the Specification for Caution Labeling for Hazardous Substances, Part 4: Marking of Packages, Containers and Vehicles, as it does not meet the criteria for any hazard class under this regulation.

TRANSPORT IN BULK ACCORDING TO THE IBC CODE: See the information under the individual jurisdiction listings for IBC information.

<u>ENVIRONMENTAL HAZARDS</u>: This material does not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN) and is not listed in Annex III under MARPOL 73/78.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA Reporting Requirements: This product is not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21): ACUTE: Yes; CHRONIC: Yes; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No

<u>U.S. SARA Threshold Planning Quantity (TPQ)</u>: There are no specific Threshold Planning Quantities for components. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA Reportable Quantity (RQ): Not applicable.

U.S. TSCA Inventory Status: Components of this product are listed on the TSCA Inventory.

<u>California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)</u>: The trace Crystalline Silica component (airborne, unbound particles of respirable size) is found on the Proposition 65 List of chemicals known to the state to cause cancer. Due to the form of the product, the Proposition 65 warning for this component is not applicable.

CANADIAN REGULATIONS:

Canadian DSL/NDSL Inventory Status: Components are on the DSL or NDSL Inventories.

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: Components are not on the CEPA Priorities Substances Lists.

<u>Canadian WHMIS Classification and Symbols</u>: This product would be categorized as a Controlled Product, D2B (Other Toxic Effects-Potential Carcinogenic Effect, Irritation) as per the Controlled Product Regulations.



CHINESE REGULATIONS:

Chinese Inventory of Existing Chemical Substances Status: Components listed by CAS# are listed on the Chinese Inventory of Existing Chemical Substances (IECSC), or are not listed, per information in Section 2.

JAPANESE REGULATIONS:

<u>Japanese ENCS</u>: Components listed by CAS# are on the ENCS Inventory, are excepted, or are not listed, per information in Section 2. <u>Japanese Ministry of Economy, Trade, and Industry (METI) Status</u>: Components are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese METI.

<u>Poisonous and Deleterious Substances Control Law</u>: Components are not listed as a Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

KOREAN REGULATIONS:

Korean Existing Chemicals List (ECL) Status: Components listed by CAS# are listed on the Korean ECL Inventory, or are not listed, per information in Section 2.

MEXICAN REGULATIONS:

Mexican Workplace Regulations (NOM-018-STPS-2000): This product is classified as hazardous.

SINGAPORE REGULATIONS:

List of Controlled Hazardous Substances: Components listed by CAS# are not listed on the Singapore List of Controlled Substances. <u>Code of Practice On Pollution Control Requirements</u>: The components identified by CAS# in Section 2 (Composition and Information on Ingredients) NOT are subject to the requirements under the Singapore Code of Practice on Pollution Control.

TAIWANESE REGULATIONS:

Taiwan Existing Chemical Substances Inventory Status: Components listed by CAS# are listed on the Taiwan Existing Chemicals List.

16. OTHER INFORMATION

REFERENCES AND DATA SOURCES: Contact the supplier for information. METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION: Criteria of the GHS were used for classification. CHEMICAL SAFETY ASSOCIATES, Inc. • PO Box 1961, Hilo, HI 96721-1961 • (800) 441-3365

PREPARED BY: DATE OF PRINTING: REVISED:

August 12, 2020 June 5, 2018 June 1, 2019 August 11, 2020

REVISION DETAILS: Revised Proposition 65 statement. Revised Hazards Identification profile.

Revision Date 12/04/2020



SECTION 1. IDENTIFICATION

| Product name : | | Sikasil [®] WS-295 |
|---|---|--|
| Company name : | | Sika Corporation |
| | | 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com |
| Telephone | : | (201) 933-8800 |
| Telefax | : | (201) 804-1076 |
| E-mail address | : | ehs@sika-corp.com |
| Emergency telephone | : | CHEMTREC: 800-424-9300 INTERNATIONAL: +1-703-527-3887 |
| Recommended use of the chemical and restrictions on use | : | For further information, refer to product data sheet. |

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Flammable liquids | : | Category 4 |
|---|---|-------------|
| Eye irritation | : | Category 2A |
| Skin sensitization | : | Category 1 |
| Reproductive toxicity | : | Category 2 |
| Specific target organ toxicity - repeated exposure | : | Category 2 |

| GHS label elements Hazard pictograms | |
|---|---|
| Signal Word | : Warning |
| Hazard Statements | H227 Combustible liquid. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H361 Suspected of damaging fertility or the unborn child. |
| | |

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| | H373 May cause damage to organs through prolonged or repeated exposure. |
|---|---|
| Precautionary Statements | Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. |
| | P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| | Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously 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. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| | Storage: P403 Store in a well-ventilated place. P405 Store locked up. |
| | Disposal: P501 Dispose of contents/ container to an approved waste disposal plant. |
| Additional Labeling There are no ingredients with Other hazards | unknown acute toxicity used in a mixture at a concentration >= 1%. |

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Components

| Chemical name | CAS-No. | Classification | Concentra- tion (% w/w) |
|---------------|---------|----------------|----------------------------|
|---------------|---------|----------------|----------------------------|

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| | 1 | | |
|------------------------------|------------|---------------------|--------------|
| 2-Butanone, O,O',O"- | 34036-80-1 | Skin Sens. 1; H317 | >= 1 - < 5 |
| (phenylsilylidyne)trioxime | | STOT RE 2; H373 | |
| butan-2-one O,O',O''- | 22984-54-9 | Eye Irrit. 2A; H319 | >= 1 - < 5 |
| (methylsilylidyne)trioxime | | Skin Sens. 1; H317 | |
| | | STOT RE 2; H373 | |
| N-(2-aminoethyl)-N'-[3- | 35141-30-1 | Acute Tox. 4; H332 | >= 1 - < 5 |
| (trimethoxysi- | | Eye Dam. 1; H318 | |
| lyl)propyl]ethylenediamine | | Skin Sens. 1A; H317 | |
| octamethylcyclotetrasiloxane | 556-67-2 | Flam. Liq. 3; H226 | >= 0.1 - < 1 |
| | | Repr. 2; H361 | |

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

| General advice | : | Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attend- ance. |
|---|---|--|
| If inhaled | : | Move to fresh air. Consult a physician after significant exposure. |
| In case of skin contact | : | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | : | Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Obtain medical attention. |
| Most important symptoms and effects, both acute and delayed | : | irritant effects sensitizing effects Allergic reactions Excessive lachrymation May cause an allergic skin reaction. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. |
| Notes to physician | : | Treat symptomatically. |

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO2)

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| Unsuitable extinguishing media | : | Water |
|--|---|---|
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | In the event of fire, wear self-contained breathing apparatus. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- tive equipment and emer- gency procedures | : | Use personal protective equipment. Deny access to unprotected persons. |
|---|---|---|
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection. |
|---|---|---|
| Advice on safe handling | : | Do not breathe vapors or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asth- ma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the ap- plication area. Follow standard hygiene measures when handling chemical products. |
| Conditions for safe storage | : | Store in original container. Keep in a well-ventilated place. Observe label precautions. Store in accordance with local regulations. |
| Materials to avoid | : | Explosives |

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Oxidizing agents Poisonous gases Poisonous liquids

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Ingredients with workplace control parameters | | | | | |
|---|--|--|--|--|--|
| Contains no substances with occupational exposure limit values. | | | | | |
| Engineering measures | Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use pro- cess enclosures, local exhaust ventilation or other engineer- ing controls to keep worker exposure below any recommend- ed or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. | | | | |
| Personal protective equipment | | | | | |
| Respiratory protection | Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk as- sessment indicates this is necessary. | | | | |
| | The filter class for the respirator must be suitable for the max- imum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when han- dling the product. If this concentration is exceeded, self- contained breathing apparatus must be used. | | | | |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. | | | | |
| Eye protection | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. | | | | |
| Skin and body protection | Choose body protection in relation to its type, to the concen- tration and amount of dangerous substances, and to the spe- cific work-place. | | | | |
| Hygiene measures | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove respiratory and skin/eye protection only after vapors have been cleared from the area. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling. | | | | |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance | : | paste |
|---|---|--|
| Color | : | various |
| Odor | : | mild, musty |
| Odor Threshold | : | No data available |
| рН | : | Not applicable |
| Melting point/range / Freezing point | : | No data available |
| Boiling point/boiling range | : | No data available |
| Flash point | : | 185 °F / 85 °C (Method: closed cup) |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | 0.01 hpa |
| Relative vapor density | : | No data available |
| Density | : | ca. 1.12 g/cm3 (73 °F / 23 °C) |
| Solubility(ies) Water solubility | : | insoluble |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n- octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | | No data available |
| Viscosity Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | > 20.5 mm2/s (104 °F / 40 °C) |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |
| Volatile organic compounds | | 37 g/l |

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(VOC) content



SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : | No dangerous reaction known under conditions of normal use. |
|---|---|---|
| Chemical stability | : | The product is chemically stable. |
| Possibility of hazardous reac- tions | : | Stable under recommended storage conditions. |
| Conditions to avoid | : | Extremes of temperature and direct sunlight. |
| Incompatible materials | : | No data available |
| Hazardous decomposition products | : | No decomposition if stored and applied as directed. |

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Components:

N-(2-aminoethyl)-N'-[3-(trimethoxysilyl)propyl]ethylenediamine:

| Acute oral toxicity | : | LD50 Oral (Rat): 7,758 mg/kg |
|---------------------------|---|---|
| Acute inhalation toxicity | : | LC50 (Rat): > 1.49 mg/l Exposure time: 4 h Test atmosphere: dust/mist |

Acute dermal toxicity : LD50 Dermal (Rat): 16,640 mg/kg

octamethylcyclotetrasiloxane:

| Acute inhalation toxicity | : LC50 (Rat |): 36 mg/l |
|---------------------------|-------------|---------------|
| | Exposure | time: 4 h |
| | Test atmos | sphere: vapor |

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

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Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

| IARC | Group 2B: Possibly carcinogenic to humans titanium dioxide Group 2B: Possibly carcinogenic to humans | 13463-67-7 |
|-------|--|------------|
| | Carbon black | 1333-86-4 |
| 00114 | Netenalizable | |

OSHA Not applicable

NTP Not applicable

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks

: Carbon black (1333-86-4) <u>Animal Toxicity:</u> Rat, oral, duration 2 year Effect: no tumors

> Mouse, oral, duration 2 years Effect: no tumors Mouse, dermal, duration 18 months Effect: no skin tumors Rat, inhalation, duration 2 years Target organ: lungs Effect: inflammation, fibrosis, tumors Note: Tumors in the rat lung are considered to be related to the "particle overload phenomenon" rather than to a specific chemical effect of carbon black itself in the lung. These effects in rats have been reported in many studies on other poorly soluble inorganic particles and appear to be rat specific. Tumors have not been observed in other species (i.e., mouse and hamster) for carbon black or other poorly soluble particles under similar circumstances and study conditions. Mortality studies (human data): A study on carbon black production workers in the UK (Sorahan, 2001) found an increased risk of lung cancer in two of the five plant studied; however, the increase was not related to the dose of carbon

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black. Thus, the authors did not consider the increased risk in lung cancer to be due to carbon black exposure. A German study of carbon black workers at one plant (Morfeld, 2006; Buechte, 2006) found a similar increase in lung cancer risk but, like the Sorohan, 2001 (UK study) found no association with carbon black exposure. A large US study of 18 plants showed a reduction in lung cancer risk in carbon black production workers (DEII, 2006). Based upon these studies, the February 2006 Working Group at the International Agency for Research on Cancer (IARC) concluded that the human evidence for carcinogenicity was inadequate (IARC, 2010). Since the IARC evaluation of carbon black, Sorahan and Harrington (2007) have re-analyzed the UK study data using an alternative exposure hypothesis and found a positive association with carbon black exposure in two of the five plants. The same exposure hypothesis was applied by Morfeld and McCunney (2009) to the German cohort; in contrast, they found no association between carbon black exposure and lung cancer risk and, thus, no support for the alternative exposure hypothesis used by Sorahan and Harrington. Overall, as a result of these detailed investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated.

IARC CANCER CLASSIFICATION: In 2006 IARC re-affirmed its 1995 finding that there is "inadequate evidence" from human health studies to assess whether carbon black causes cancer in humans. IARC concluded that there is "sufficient evidence" in experimental animal studies for the carcinogenicity of carbon black. IARC's overall evaluation is that carbon black is "possibly carcinogenic to humans" (Group 2B)". This conclusion was based on IARC's guidelines, which generally require such a classification if one species exhibits carcinogenicity in two or more animal studies (IARC, 2010).

Solvent extracts of carbon black were used in one study of rats in which skin tumors were found after dermal application and several studies of mice in which sarcomas were found following subcutaneous injection. IARC concluded that there was "sufficient evidence" that carbon black extracts can cause cancer in animals (Group 2B).

ICGIH CANCER CLASSIFICATION: Confirmed Animal Carcinogen with Unknown Relevance to Humans (Category A3 Carcinogen).

ASSESSMENT: Applying the guidelines of self-classification under the Globally Harmonized System of Classification and Labeling of Chemicals, carbon black is not classified as a carcinogen. Lung tumors are induced in rats as a result of repeated exposure to inert, poorly soluble particles like carbon black and other poorly soluble particles. Rats tumors are a result of a secondary non-genotoxic mechanism that has questionable relevance for classification in humans. In support of this opinion, the CLP Guidance for Specific Target Organ Toxicity - Repeated Exposure (STOT-RE), cites lung overload

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under mechanisms not relevant to humans. Human health studies show that exposure to carbon black does not increase the risk to carcinogenicity.

Titanium dioxide (13463-67-7)

In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have shown to cause an increase in lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. The potential for these adverse health effects appears to be closely related to the particle size and the amount of the exposed surface area that comes into contact with the lung. However, tests with other laboratory animals such as mice and hamsters, indicate that rats are significantly more susceptible to the pulmonary overload and inflammation that causes lung cancer. Epidemiological studies do not suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide. Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion). It has not been characterized as a potential carcinogen by either NTP or OSHA.

SECTION 12. ECOLOGICAL INFORMATION

assessment

| 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 infor- : mation | Do not empty into drains; dispose of this material and its con- tainer in a safe way. |
| | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. |
| Components: | |
| | |
| octamethylcyclotetrasiloxane: | |
| Results of PBT and vPvB : | PBT substance |

: vPvB substance

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SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal methods | | |
|------------------------|---|---|
| Waste from residues | : | 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. |
| Contaminated packaging | : | Empty containers should be taken to an approved waste han- dling site for recycling or disposal. |

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Domestic regulation

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA list

: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

| SARA 311/312 Hazards | : | Flammable (gases, aerosols, liquids, or solids) Respiratory or skin sensitization Reproductive toxicity Specific target organ toxicity (single or repeated exposure) Serious eye damage or eye irritation |
|----------------------|---|---|
| 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. |

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Clean Air Act

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

MARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

Notes to Reader

The information contained in this Safety Data Sheet applies only to the actual Sika Corporation ("Sika") product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed in Section 1 of this SDS.

SIKA MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY ARISING FROM THIS INFORMATION OR ITS USE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES AND SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

All sales of Sika products are subject to its current terms and conditions of sale available at www.sikausa.com or 201-933-8800.

Revision Date 12/04/2020

000000608042 US / Z8

Revision Date 04/29/2015



1. Identification

| Product name | : | Sika AnchorFix [®] -2 Part A |
|---|---|--|
| Supplier | : | Sika Corporation |
| Address | : | 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com |
| Telephone | : | (201) 933-8800 |
| Telefax | : | (201) 804-1076 |
| Emergency telephone | : | CHEMTREC: 800-424-9300 INTERNATIONAL: 703-527-3887 ehs@sika-corp.com |
| Recommended use of the chemical and restrictions on use | : | For further information, refer to the product technical data sheet. |

2. Hazards identification

GHS Classification

Skin sensitization, Category 1 Carcinogenicity, Category 2 Specific target organ systemic toxicity repeated exposure, Category 1, Lungs (Inhalation)

H317: May cause an allergic skin reaction.H351: Suspected of causing cancer.H372: Causes damage to organs through prolonged or repeated exposure if inhaled.

| GHS Label element | |
|--------------------------|---|
| Hazard pictograms | |
| Signal Word | : Danger |
| Hazard Statements | H317 May cause an allergic skin reaction. H351 Suspected of causing cancer. H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled. |
| Precautionary Statements | Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P272 Contaminated work clothing must not be allowed out of |

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the workplace. P280 Wear protective gloves. P281 Use personal protective equipment as required. **Response:** P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P363 Wash contaminated clothing before reuse. **Storage:** P405 Store locked up. **Disposal:** P501 Dispose of contents/ container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms. There are no hazards not otherwise classified that have been identified during the classification process.

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

3. Composition/information on ingredients

Hazardous ingredients

| Chemical Name | CAS-No. | Concentration (%) |
|--|------------|-------------------|
| Quartz (SiO2) | 14808-60-7 | >= 50 - <= 100 % |
| 2,2'-ethylenedioxydiethyl dimethacrylate | 109-16-0 | >= 20 - < 25 % |
| Quartz (SiO2) <5µm | 14808-60-7 | >= 20 - < 25 % |
| titanium dioxide | 13463-67-7 | < 1 % |

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.

4. First aid measures

| If inhaled | : Move to fresh air. Consult a physician after significant exposure. |
|-------------------------|--|
| In case of skin contact | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician. |
| In case of eye contact | Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. |

Sika AnchorFix[®]-2 Part A

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| Most important symptoms and effects, both acute and delayed | : sensitizing effects |
|--|---|
| uelayeu | Allergic reactions See Section 11 for more detailed information on health effects and symptoms. |
| | May cause an allergic skin reaction. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure if inhaled. |
| Protection of first-aiders | Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. |
| Notes to physician | : Treat symptomatically. |
| 5. Fire-fighting measures | |
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Specific extinguishing methods | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : In the event of fire, wear self-contained breathing apparatus. |
| 6. Accidental release measures | |
| Personal precautions, protective equipment and emergency procedures Environmental precautions | Use personal protective equipment. Deny access to unprotected persons.Do not flush into surface water or sanitary sewer system. |
| | If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. |

7. Handling and storage

| Advice on safe handling | : Avoid exceeding the given occupational exposure limits (see section 8). | |
|-------------------------|---|--|
| | Section 0). | |

Sika AnchorFix[®]-2 Part A



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| | Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products. |
|-----------------------------|---|
| Conditions for safe storage | Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations. |
| Materials to avoid | : No data available |

8. Exposure controls/personal protection

| Component | CAS-No. | Basis ** | Value | Exposure limit(s)* / Form of exposure |
|---------------|------------|----------|-------|--|
| Quartz (SiO2) | 14808-60-7 | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | OSHA Z-3 | TWA | 30 mg/m3 / %SiO2+2 total dust |
| | | OSHA Z-3 | TWA | 10 mg/m3 / %SiO2+2 respirable |
| | | OSHA Z-3 | TWA | 250 mppcf / %SiO2+5 respirable |
| | | OSHA P0 | TWA | 0.1 mg/m3 Respirable fraction |
| | | OSHA P0 | TWA | 0.1 mg/m3 respirable dust fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |

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| Quartz (SiO2) <5µm | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
|--------------------|------------|----------|-----|--|
| | | OSHA Z-3 | TWA | 30 mg/m3 / %SiO2+2 total dust |
| | | OSHA Z-3 | TWA | 10 mg/m3 / %SiO2+2 respirable |
| | | OSHA Z-3 | TWA | 250 mppcf / %SiO2+5 respirable |
| | | OSHA P0 | TWA | 0.1 mg/m3 Respirable fraction |
| | | OSHA P0 | TWA | 0.1 mg/m3 respirable dust fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| titanium dioxide | 13463-67-7 | OSHA P0 | TWA | 10 mg/m3 Total |
| | | OSHA Z-1 | TWA | 15 mg/m3 total dust |
| | | OSHA P0 | TWA | 10 mg/m3 Total dust |
| | | ACGIH | TWA | 10 mg/m3 |

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**<u>Basis</u>

ACGIH. Threshold Limit Values (TLV) OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values) OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant OSHA P2. Permissible Exposure Limits (PEL), Table Z-2 OSHA Z3. Table Z-3, Mineral Dust

Engineering measures : Use of adequate ventilation should be sufficient to control

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| | worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. |
|------------------------------|---|
| Personal protective equipmen | t |
| Respiratory protection | Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. |
| | The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. |
| Hand protection Remarks | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Eye protection | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. |
| Skin and body protection | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. |
| Hygiene measures | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling. |

9. Physical and chemical properties

| Appearance | : | viscous liquid |
|------------------------------|---|---------------------|
| Color | : | gray |
| Odor | : | characteristic |
| Odor Threshold | : | No data available |
| Flash point | : | > 302 °F (> 150 °C) |
| Ignition temperature | : | Not applicable |
| Decomposition temperature | : | No data available |
| Lower explosion limit (Vol%) | : | No data available |
| | | |

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| Upper explosion limit (Vol%) | : | No data available |
|--|---|------------------------------------|
| Flammability (solid, gas) | : | No data available |
| Oxidizing properties | : | No data available |
| Autoignition temperature | : | No data available |
| рН | : | No data available |
| Melting point/range / Freezing point | : | No data available |
| Boiling point/boiling range | : | No data available |
| Vapor pressure | : | No data available |
| Density | : | ca.1.65 g/cm3 |
| Water solubility | : | Note: insoluble |
| Partition coefficient: n- octanol/water | : | No data available |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | > 20.5 mm2/s at 104 °F (40 °C) |
| Relative vapor density | : | No data available |
| Evaporation rate | : | No data available |
| Burning rate | : | No data available |
| Volatile organic compounds (VOC) content | : | 43 g/I A +B Combined |

10. Stability and reactivity

| : No dangerous reaction known under conditions of normal use. |
|---|
| : The product is chemically stable. |
| : Stable under recommended storage conditions. |
| : No data available |
| : No data available |
| |

11. Toxicological information

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.



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| Serious eye damage/eye irrit Not classified based on availal | | | | |
|---|--|--------------------------------|--|--|
| Respiratory or skin sensitization | | | | |
| Skin sensitization: May cause an allergic skin reaction. Respiratory sensitization: Not classified based on available information. | | | | |
| Germ cell mutagenicity Not classified based on availal | ble information. | | | |
| Carcinogenicity | | | | |
| Suspected of causing cancer. | Group 2B: Possibly carcinoger | nic to humans | | |
| | titanium dioxide Group 1: Carcinogenic to hum | 13463-67-7 ans | | |
| NTP | Quartz (SiO2) Quartz (SiO2) <5µm Known to be human carcinoge | 14808-60-7 14808-60-7 an | | |
| | Quartz (SiO2) Quartz (SiO2) <5µm | 14808-60-7 14808-60-7 | | |

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified based on available information.

12. Ecological information

| Other information | Do not empty into drains; dispose of this material and its container in a safe way. | | |
|-------------------|---|--|--|
| | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. | | |

13. Disposal considerations

Disposal methods

Waste from residues

: 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

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| | local authority requirements. |
|------------------------|--|
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. |

14. Transport information

DOT Not dangerous goods IATA Not dangerous goods IMDG Not dangerous goods

Special precautions for user No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory information

TSCA list

: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

| SARA 311/312 Hazards | : | Chronic Health Hazard Acute Health Hazard |
|----------------------|---|---|
| SARA 302 | : | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. |
| 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. |
| Clean Air Act | | |



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| Ozone-Depletion Potential | 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). |
|---|---|
| Air Act Section 12 (40 CFR This product does not conta | in any hazardous air pollutants (HAP), as defined by the U.S. Clean 61). in any chemicals listed under the U.S. Clean Air Act Section 112(r) for ion (40 CFR 68.130, Subpart F). |
| California Prop 65 | WARNING! This product contains a chemical known in the |

State of California to cause cancer.

16. Other information

HMIS Classification

| Health | * | 3 |
|------------------|-----|---|
| Flammability | | 1 |
| Physical Hazard | | 0 |
| Personal Protect | ion | X |

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

The information contained in this Safety Data Sheet applies only to the actual Sika Corporation ("Sika") product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed in Section 1 of this SDS.

SIKA MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY ARISING FROM THIS INFORMATION OR ITS USE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES AND SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

All sales of Sika products are subject to its current terms and conditions of sale available at www.sikausa.com or 201-933-8800.

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Material number: 417890

Revision Date 04/29/2015



1. Identification

| Product name | : | Sika AnchorFix [®] -2 Part B |
|---|---|--|
| Supplier | : | Sika Corporation |
| Address | : | 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com |
| Telephone | : | (201) 933-8800 |
| Telefax | : | (201) 804-1076 |
| Emergency telephone | : | CHEMTREC: 800-424-9300 INTERNATIONAL: 703-527-3887 ehs@sika-corp.com |
| Recommended use of the chemical and restrictions on use | : | For further information, refer to the product technical data sheet. |

2. Hazards identification

GHS Classification

Eye irritation, Category 2A Skin sensitization, Category 1 Carcinogenicity, Category 1A

GHS Label element

Hazard pictograms

Signal Word

Hazard Statements

H319: Causes serious eye irritation. H317: May cause an allergic skin reaction. H350: May cause cancer.



: H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H350 May cause 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/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear eye protection/ face protection. P280 Wear protective gloves. P281 Use personal protective equipment as required.

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Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously 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. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P363 Wash contaminated clothing before reuse. Storage: P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms. There are no hazards not otherwise classified that have been identified during the classification process.

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

3. Composition/information on ingredients

Hazardous ingredients

| Chemical Name | CAS-No. | Concentration (%) |
|--------------------|------------|-------------------|
| Quartz (SiO2) | 14808-60-7 | >= 25 - < 50 % |
| dibenzoyl peroxide | 94-36-0 | >= 10 - < 20 % |
| Quartz (SiO2) <5µm | 14808-60-7 | < 1 % |

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.

4. First aid measures

| If inhaled | : Move to fresh air. Consult a physician after significant exposure. |
|-------------------------|--|
| In case of skin contact | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician. |
| In case of eye contact | Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | : Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. |



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| | Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. |
|---|---|
| Most important symptoms and effects, both acute and delayed | Allergic reactions Excessive lachrymation See Section 11 for more detailed information on health effects and symptoms. |
| | irritant effects sensitizing effects carcinogenic effects |
| | May cause an allergic skin reaction. Causes serious eye irritation. May cause cancer. |
| Protection of first-aiders | Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. |
| Notes to physician | : Treat symptomatically. |

5. Fire-fighting measures

| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | |
|--|---|---|
| Specific extinguishing methods | Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. Th must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. | |
| Special protective equipment for fire-fighters | : In the event of fire, wear self-contained breathing apparatus. | - |

6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment. Deny access to unprotected persons. |
|---|---|
| Environmental precautions | Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained. |
| Methods and materials for containment and cleaning up | : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. |

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7. Handling and storage

| Advice on safe handling | Do not breathe vapors or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products. |
|-----------------------------|---|
| Conditions for safe storage | Prevent unauthorized access. Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations. |
| Materials to avoid | No data available |

8. Exposure controls/personal protection

| Component | CAS-No. | Basis ** | Value | Exposure limit(s)* / Form of exposure |
|---------------|------------|----------|-------|--|
| Glycerol | 56-81-5 | OSHA PO | TWA | 10 mg/m3 Total |
| | | ACGIH | TWA | 10 mg/m3 |
| Quartz (SiO2) | 14808-60-7 | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | OSHA Z-3 | TWA | 30 mg/m3 / %SiO2+2 total dust |
| | | OSHA Z-3 | TWA | 10 mg/m3 / %SiO2+2 respirable |
| | | OSHA Z-3 | TWA | 250 mppcf / %SiO2+5 respirable |
| | | OSHA P0 | TWA | 0.1 mg/m3 |

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| | | | | Respirable fraction |
|--------------------|------------|----------|-----|--|
| | | OSHA P0 | TWA | 0.1 mg/m3 respirable dust fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| dibenzoyl peroxide | 94-36-0 | ACGIH | TWA | 5 mg/m3 |
| | | OSHA Z-1 | TWA | 5 mg/m3 |
| | | OSHA P0 | TWA | 5 mg/m3 |
| Quartz (SiO2) <5µm | 14808-60-7 | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | OSHA Z-3 | TWA | 30 mg/m3 / %SiO2+2 total dust |
| | | OSHA Z-3 | TWA | 10 mg/m3 / %SiO2+2 respirable |
| | | OSHA Z-3 | TWA | 250 mppcf / %SiO2+5 respirable |
| | | OSHA P0 | TWA | 0.1 mg/m3 Respirable fraction |
| | | OSHA P0 | TWA | 0.1 mg/m3 respirable dust fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |
| | | ACGIH | TWA | 0.025 mg/m3 Respirable fraction |

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*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**<u>Basis</u>

ACGIH. Threshold Limit Values (TLV) OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values) OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant OSHA P2. Permissible Exposure Limits (PEL), Table Z-2 OSHA Z3. Table Z-3, Mineral Dust

| Engineering measures | : Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. | > |
|----------------------|---|---|
| | | |

Personal protective equipment

| Respiratory protection : | Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. |
|------------------------------|--|
| | The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. |
| Hand protection Remarks : | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Eye protection : | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary. |
| Skin and body protection : | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. |
| Hygiene measures : | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling. |

9. Physical and chemical properties

Sika AnchorFix[®]-2 Part B

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| Appearance Color | : | liquid various |
|---|---|------------------------------------|
| Odor | : | slight |
| Odor Threshold | : | No data available |
| Flash point | : | Note: Not applicable |
| Ignition temperature | : | Not applicable |
| Decomposition temperature | : | No data available |
| Lower explosion limit (Vol%) | : | No data available |
| Upper explosion limit (Vol%) | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Oxidizing properties | : | No data available |
| Autoignition temperature | : | No data available |
| рН | : | No data available |
| Melting point/range / | : | No data available |
| Freezing point Boiling point/boiling range | : | No data available |
| Vapor pressure | : | No data available |
| Density | : | ca.1.55 g/cm3 at 68 °F (20 °C) |
| Water solubility | : | No data available |
| Partition coefficient: n- | : | No data available |
| octanol/water Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | > 20.5 mm2/s at 104 °F (40 °C) |
| Relative vapor density | : | No data available |
| Evaporation rate | : | No data available |
| Burning rate | : | No data available |
| Volatile organic compounds (VOC) content | : | 43 g/l A+B Combined |



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| 10. Stability and reactivity | |
|---------------------------------------|---|
| Reactivity | : No dangerous reaction known under conditions of normal use. |
| Chemical stability | : The product is chemically stable. |
| Possibility of hazardous reactions | : Stable under recommended storage conditions. |
| Conditions to avoid | : No data available |
| Incompatible materials | : No data available |

11. Toxicological information

Acute toxicity

Not classified based on available information.

Ingredients:

| dibenzoyl peroxide: Acute oral toxicity | : LD50 Oral (Rat): > 5,000 mg/kg |
|--|---|
| Acute inhalation toxicity | : LC50 (Rat): > 24.3 mg/l Exposure time: 4 h |

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction. Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

| May cause cancer. IARC | Group 1: Carcinogenic to humans | | |
|---------------------------|---|----------------------------------|--|
| NTP | Quartz (SiO2) Quartz (SiO2) <5µm Known to be human carcin | 14808-60-7 14808-60-7 ogen | |
| | Quartz (SiO2) Quartz (SiO2) <5µm | 14808-60-7 14808-60-7 | |

Reproductive toxicity

Not classified based on available information.

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STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified based on available information.

12. Ecological information

| Other information | Do not empty into drains; dispose of this material and its container in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May be harmful to the environment if released in large |
|-------------------|--|
| | May be harmful to the environment if released in large quantities. Water polluting material. |

13. Disposal considerations

Disposal methods

| Waste from residues | : | 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. |
|------------------------|---|---|
| Contaminated packaging | : | Empty containers should be taken to an approved waste handling site for recycling or disposal. |

14. Transport information

DOT Not regul

Not regulated

| IATA UN number | 3082 |
|---|--|
| Description of the goods | Environmentally hazardous substance, liquid, n.o.s. |
| 2000.p.io o. i.io 90000 | (dibenzoyl peroxide, nonylbenzoate, branched and linear) |
| Class | 9 |
| Packing group | III |
| Labels | 9 |
| Packing instruction (cargo aircraft) | 964 |
| Packing instruction | 964 |

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| (passenger aircraft) Packing instruction (passenger aircraft) | Y964 |
|---|--|
| IMDG | |
| UN number | 3082 |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| - | (dibenzoyl peroxide, nonylbenzoate, branched and linear) |
| Class | 9 |
| Packing group | |
| Labels | 9 |
| EmS Number 1 | F-A |
| EmS Number 2 | S-F |
| Marine pollutant | yes |

IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

Special precautions for user

No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

| SARA 311/312 Hazards | : Acute Health Hazard Chronic Health Hazard | |
|----------------------|--|----------------------|
| SARA 302 | : No chemicals in this material are subject to the report requirements of SARA Title III, Section 302. | orting |
| SARA 313 | | evels 00 % 0 % |

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Clean Air Act

| Ozone-Depletion | This product neither contains, nor was manufactured with a |
|-----------------|---|
| Potential | 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). |
| | |

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (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 65WARNING! This product contains a chemical known in the
State of California to cause cancer.

16. Other information

HMIS Classification

| Health | * | 3 |
|------------------|-----|---|
| Flammability | | 0 |
| Physical Hazard | | 0 |
| Personal Protect | ion | X |

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

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Sika AnchorFix[®]-2 Part B

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Material number: 426081