1. Identification of the Substance / Preparation

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>MIGUTAN-FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other identifier or names</td>
<td>MIGUTAN FP-110, MIGUTAN FP-155</td>
</tr>
<tr>
<td>UN ID number</td>
<td>None</td>
</tr>
</tbody>
</table>
| Manufacturer Address      | EMSEAL Joint Systems, Ltd.  
                          | 25 Bridle Lane  
                          | Westborough, MA 01581 |
| Company Phone             | (508) 836-0280 M-F 9am - 5pm |
| Emergency Phone           | CHEMTREC (800) 424-9300 (24 Hours) |

2. Hazardous Indentification

<table>
<thead>
<tr>
<th>Hazardous Classification</th>
<th>This product is not classified as hazardous.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Word</td>
<td>None</td>
</tr>
<tr>
<td>Pictograms</td>
<td>None</td>
</tr>
<tr>
<td>Emergency Overview:</td>
<td>No emergency requirements.</td>
</tr>
</tbody>
</table>

3. Composition / Information on Ingredients

*MIGUTAN-FP is considered an “ARTICLE”. It contains no hazardous materials and is sold as a solid product. No Safety Data Sheet is necessary for this product.*

4. First Aid Measures

<table>
<thead>
<tr>
<th>4.1 EYES:</th>
<th>None required with normal handling.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 SKIN:</td>
<td>None required with normal handling.</td>
</tr>
<tr>
<td>4.3 INGESTION:</td>
<td>None required with normal handling.</td>
</tr>
</tbody>
</table>
5. Fire-fighting Measures

5.2 FLAMMABILITY: Inherently fire-resistant
5.2 FLASH POINT: Unknown.
5.3 AUTO-IGNITION TEMPERATURE: Unknown.
5.4 EXTINGUISHING MEDIA: Water, foam, powder.
5.5 HAZARDOUS DECOMPOSITION PRODUCTS: None

6. Accidental Release Measures

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

7. Handling and Storage

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: Not required

9. Physical and Chemical Properties

9.1 APPEARANCE: Black
9.2 ODOR: None
9.3 PERCENT SOLIDS BY WEIGHT: 100%
9.4 PHYSICAL STATE: Solid
9.5 PERCENT VOLATILE: NA
9.6 DENSITY: NA
9.7 DECOMPOSITION: NA
9.8 SOLUBILITY IN WATER: NA
10. Stability and Reactivity

Stable under normal conditions.

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.
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

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 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).

<table>
<thead>
<tr>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Emergency Overview

WARNING

Hazard statements
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
**Appearance** Opaque Grey  
**Physical state** Liquid  
**Odor** Mild

### 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)
- 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** Epoxy A Side  
**Chemical nature** Epoxy resin mixture.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>25068-38-6</td>
<td>70 - 100</td>
<td>*</td>
</tr>
</tbody>
</table>

* 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 effects, both acute and delayed  

Symptoms  May cause allergic skin reaction.

Indication of any immediate medical 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.

Specific hazards arising from the chemical  Cool closed containers exposed to fire with water spray. Do not 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 Impact  None.

Sensitivity to Static Discharge  None.

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 containment and cleaning up

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

7. Handling and Storage

Precautions for safe handling

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

Conditions for safe storage, including 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, 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Opaque</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Grey</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt; 250 °C</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 220 °C</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
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

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 tested.

Inhalation
Remove to fresh air.

Eye contact
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
Not an expected route of exposure. Do NOT taste or swallow. May be harmful if swallowed.

Component Information
Caution - This preparation contains a substance not yet fully tested

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ATEmix (oral)</th>
<th>ATEmix (dermal)</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A diglycidyl ether resin</td>
<td>11400 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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.

Serious eye damage/eye irritation  
Irritating to eyes.

Irritation  
Irritating to eyes and skin.

Sensitization  
May cause sensitization by skin contact.

Germ cell mutagenicity  
N/A.

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 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 - Product Information

Unknown acute toxicity  
5.00000532% 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)  
12,030.00 mg/kg mg/l

12. Ecological Information

Ecotoxicity  
N/A
5.23999 % of the mixture consists of component(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)  

IATA  

UN/ID no.  
UN3082

Proper shipping name  
Environmentally Hazardous substance Liquid N.O.S. (Bisphenol A epoxy resin)

Hazard Class  
9

Packing Group  
III
IMDG

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

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

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide - 13463-67-7</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Carbon Black - 1333-86-4</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Glycidyl phenyl ether - 122-60-1</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Epichlorohydrin - 106-89-8</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Silicon dioxide - 14808-60-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>
U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number  Not applicable

16. Other Information

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2*</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Chronic Hazard Star Legend

* = Chronic Health Hazard

Prepared By  Compliance
Issuing Date  10-Sep-2015
Revision Date  06-Nov-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 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

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).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category B</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Emergency Overview

DANGER

Hazard statements
Causes severe skin burns and eye damage
May cause an allergic skin reaction
Harmful if inhaled
Harmful if swallowed
Appearance  Clear Light yellow  Physical state  Liquid  Odor  Mild amine odor

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Family</th>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy B Side</td>
<td>m-Xylylenediamine</td>
<td>1477-55-0</td>
<td>15 - 30</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>1,4,7,10,13-Pentaazatridecane</td>
<td>112-57-2</td>
<td>1 - 10</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

4. 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 effects, both acute and delayed

Symptoms
May cause allergic skin reaction.

Indication of any immediate medical 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.

Specific hazards arising from the chemical
Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Substance will react with water (some violently) releasing flammable, toxic or corrosive gases and runoff. Cool closed containers exposed to fire with water spray. Do not 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 Impact
None.

Sensitivity to Static Discharge
None.

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

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 containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL (vacated)</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylenediamine 1477-55-0</td>
<td>S*</td>
<td>(vacated) S*</td>
<td>Ceiling: 0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Ceiling: 0.1 mg/m³</td>
<td>Ceiling: 0.1 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Appearance</th>
<th>Odor</th>
<th>Odor threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Clear</td>
<td>Mild amine odor</td>
<td>N/A</td>
</tr>
<tr>
<td>Color</td>
<td>Light yellow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks • Method</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>10.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 110 °C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>0.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Negligible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>459 cSt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>450 cps @ 25° C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not an explosive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liquid Density</td>
<td>8.23 pounds/gallon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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**


**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

**Information on likely routes of exposure**

**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.

Ingestion

Component Information

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

Caution - This preparation contains a substance not yet fully tested

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ATEmix (oral)</th>
<th>ATEmix (dermal)</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylylenediamine 1477-55-0</td>
<td>= 1040 mg/kg (Rat)</td>
<td>= 2 g/kg (Rabbit)</td>
<td>= 2.4 mg/kg (Rat) 4 h</td>
</tr>
<tr>
<td>1,4,7,10,13-Pentaaazatridecane 112-57-2</td>
<td>= 3990 mg/kg (Rat)</td>
<td>= 660 μL/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

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.

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/A.

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4,7,10,13-Pentaaazatridecane 112-57-2</td>
<td>2.1: 72 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>420: 96 h Poecilia reticulata mg/L LC50 static</td>
<td>24.1: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and degradability

N/A

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4,7,10,13-Pentaaazatridecane 112-57-2</td>
<td>1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-Xylylenediamine 1477-55-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1,4,7,10,13-Pentaazatridecane 112-57-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other Information

NFPA
Health hazards 2  Flammability 1  Instability 0

HMIS
Health hazards 2  Flammability 1  Physical hazards 0  Personal Protection X

Prepared By Compliance
Issuing Date 10-Sep-2015
Revision Date 06-Nov-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 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
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: 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

Company Phone Number
508-836-0280 (9AM - 5PM EST) (M-F)

Emergency Telephone
Chemtrec 1-800-424-9300 (24 Hours)

2. HAZARD(S) IDENTIFICATION

Classification:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Hazardous</td>
<td>Carcinogen Category 1A</td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity – Repeated Exposure Category 1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica (quartz)</td>
<td>14808-60-7</td>
<td>95-99.9</td>
</tr>
</tbody>
</table>

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:**

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica (quartz)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 mg/m³</td>
<td>0.025 mg/m³</td>
<td>0.05 mg/m³</td>
</tr>
<tr>
<td></td>
<td>%SiO₂ + 2 TWA (respirable dust)</td>
<td>(respirable dust)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30 mg/m³</td>
<td>%SiO₂ + 2 TWA (total dust)</td>
<td>(total dust)</td>
</tr>
</tbody>
</table>

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/nptl/topics/respirators](http://www.cdc.gov/niosh/nptl/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 μg/m³, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 μg/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 addition a cartridge change-out schedule must be developed based on the concentrations in the workplace.

<table>
<thead>
<tr>
<th>Assigned protection factor</th>
<th>Type of Respirator (Use only NIOSH-certified respirators)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Any air-purifying elastomeric half-mask respirator equipped with appropriate type of particulate filter. ²</td>
</tr>
<tr>
<td></td>
<td>Appropriate filtering facepiece respirator ³</td>
</tr>
<tr>
<td></td>
<td>Any air-purifying full facepiece respirator equipped with appropriate type of particulate filter. ²</td>
</tr>
<tr>
<td></td>
<td>Any negative pressure (demand) supplied-air respirator equipped with a half-mask.</td>
</tr>
<tr>
<td>25</td>
<td>Any powered air-purifying respirator equipped with a hood or helmet and a high efficiency (H1EPA) filter.</td>
</tr>
<tr>
<td></td>
<td>Any continuous flow supplied-air respirator equipped with a hood or helmet.</td>
</tr>
<tr>
<td>50</td>
<td>Any air-purifying full facepiece respirator equipped with N-100, R-100, or P-100 filter(s).</td>
</tr>
<tr>
<td></td>
<td>Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and a high-efficiency filter.</td>
</tr>
<tr>
<td></td>
<td>Any negative pressure (demand) supplied-air respirator equipped with a full facepiece.</td>
</tr>
<tr>
<td></td>
<td>Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece).</td>
</tr>
<tr>
<td></td>
<td>Any negative pressure (demand) self-contained respirator equipped with a full facepiece.</td>
</tr>
<tr>
<td>1,000</td>
<td>pressure-demand supplied-air respirator equipped with a half-mask.</td>
</tr>
</tbody>
</table>

1. The protection offered by a given respirator is contingent upon (1) the respirator user adhering to complete program 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.

<table>
<thead>
<tr>
<th>Odor threshold</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined</td>
<td>6-8</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>3110°F/1710°C</td>
</tr>
<tr>
<td>Flash point: Not applicable</td>
<td>Boiling point/range: 4046°F/2230°C</td>
</tr>
<tr>
<td>Flammable limits: LEL: Not applicable</td>
<td>Evaporation rate: Not applicable</td>
</tr>
<tr>
<td>Vapor pressure: Not applicable</td>
<td>UEL: Not applicable</td>
</tr>
<tr>
<td>Relative density: 2.65</td>
<td>Vapor density: Not applicable</td>
</tr>
<tr>
<td></td>
<td>Solubility(ies): Insoluble in water</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**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:

Chronic or Ordinary Silicosis 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).

Accelerated Silicosis 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.

Acute Silicosis 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 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, 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 silica-exposed 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 [www.federalregister.gov/articles/2013/09/12/2013-20997/occupational-exposure-to-respirable-crystalline-silica](http://www.federalregister.gov/articles/2013/09/12/2013-20997/occupational-exposure-to-respirable-crystalline-silica).

**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)**

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

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

**CERCLA:** 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.

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

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

California Inhalation Reference Exposure Level (REL): 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.

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

Texas Commission on Environmental Quality: 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 www.tceq.texas.gov.

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, http://monographs.iarc.fr/ENG/Monographs/PDFs/index.php.

Company Disclaimer

The information and recommendations contained herein are based upon data believed to be up-to-date 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.
Safety Data Sheet

Sika AnchorFix®-2 Part A

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 : H317: May cause an allergic skin reaction.
Carcinogenicity , Category 2 : H351: Suspected of causing cancer.
Specific target organ systemic toxicity - repeated exposure , Category 1, Lungs (Inhalation) : 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
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 50 - &lt;= 100 %</td>
</tr>
<tr>
<td>2,2’-ethylenedioxydiethyl dimethacrylate</td>
<td>109-16-0</td>
<td>&gt;= 20 - &lt; 25 %</td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
<td>&gt;= 20 - &lt; 25 %</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt; 1 %</td>
</tr>
</tbody>
</table>

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.
Most important symptoms and effects, both acute and delayed: sensitizing effects

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: 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.

7. Handling and storage

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 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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Basis **</th>
<th>Value</th>
<th>Exposure limit(s)* / Form of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.025 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA Z-3 TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 mg/m3 / %SiO2+2 total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA Z-3 TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 mg/m3 / %SiO2+2 respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA Z-3 TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>250 mppcf / %SiO2+5 respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA P0 TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.1 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA P0 TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.1 mg/m3 respirable dust fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACGIH TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.025 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACGIH TWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.025 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td>Substance</td>
<td>Source</td>
<td>Limit</td>
<td>Basis</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------</td>
<td>---------------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>ACGIH TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-3 TWA</td>
<td>30 mg/m³ / %SiO2+2</td>
<td>total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-3 TWA</td>
<td>10 mg/m³ / %SiO2+2</td>
<td>respirable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-3 TWA</td>
<td>250 mppcf / %SiO2+5</td>
<td>respirable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA P0 TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA P0 TWA</td>
<td>0.1 mg/m³</td>
<td>respirable dust fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACGIH TWA</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction</td>
<td></td>
</tr>
<tr>
<td>titanium dioxide 13463-67-7</td>
<td>OSHA P0 TWA</td>
<td>10 mg/m³</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1 TWA</td>
<td>15 mg/m³</td>
<td>total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA P0 TWA</td>
<td>10 mg/m³</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACGIH TWA</td>
<td>10 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Basis**
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**

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
Upper explosion limit (Vol%) : No data available
Flammability (solid, gas) : No data available
Oxidizing properties : No data available
Autoignition temperature : No data available
pH : 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/l A +B Combined

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
Not classified based on available information.
Skin corrosion/irritation
Not classified based on available information.

Serious eye damage/eye irritation
Not classified based on available information.

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
Suspected of causing cancer.

IARC
Group 2B: Possibly carcinogenic to humans

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
</tr>
<tr>
<td>Quart (SiO2)</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
</tr>
</tbody>
</table>

NTP
Known to be human carcinogen

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
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
10. 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).

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).

16. Other information

HMIS Classification

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>X</td>
</tr>
</tbody>
</table>

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.

Revision Date 04/29/2015

Material number: 417890
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 H319: Causes serious eye irritation.
Skin sensitization, Category 1 H317: May cause an allergic skin reaction.
Carcinogenicity, Category 1A H350: May cause cancer.

GHS Label element

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : 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.
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

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 25 - &lt; 50 %</td>
</tr>
<tr>
<td>dibenzoyl peroxide</td>
<td>94-36-0</td>
<td>&gt;= 10 - &lt; 20 %</td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
<td>&lt; 1 %</td>
</tr>
</tbody>
</table>

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.
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. 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:
- 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.
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

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Basis **</th>
<th>Value</th>
<th>Exposure limit(s)* / Form of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>56-81-5</td>
<td>OSHA P0</td>
<td>TWA</td>
<td>10 mg/m3 Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACGIH TWA 10 mg/m3</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>ACGIH</td>
<td>TWA</td>
<td>0.025 mg/m3 Respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA Z-3 TWA 30 mg/m3 / %SiO2+2 total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA Z-3 TWA 10 mg/m3 / %SiO2+2 respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OSHA Z-3 TWA 250 mppcf / %SiO2+5 respirable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>TWA</td>
<td>0.1 mg/m3</td>
</tr>
<tr>
<td>Substance</td>
<td>ACGIH</td>
<td>TWA</td>
<td>Respirable fraction</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------</td>
<td>------------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>dibenzoyl peroxide</td>
<td>94-36-0</td>
<td>ACGIH</td>
<td>TWA 5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quartz (SiO₂) &lt;5µm</td>
<td>14808-60-7</td>
<td>ACGIH</td>
<td>TWA 0.025 mg/m³ Respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-3</td>
<td>TWA 30 mg/m³ / %SiO₂+2 total dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-3</td>
<td>TWA 10 mg/m³ / %SiO₂+2 respirable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA Z-3</td>
<td>TWA 250 mppcf / %SiO₂+5 respirable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>TWA 0.1 mg/m³ Respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>TWA 0.1 mg/m³ respirable dust fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA 0.025 mg/m³ Respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA 0.025 mg/m³ Respirable fraction</td>
<td></td>
</tr>
</tbody>
</table>
*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Basis**
ACGIH. Threshold Limit Values (TLV)
OSHA P0. Table Z-1, Limit for Air Contaminant (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
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.

Remarks

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 : liquid
Color : 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
pH : 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.1.55 g/cm³ at 68 °F (20 °C)
Water solubility : No data available
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/l A+B Combined
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

- Quartz (SiO2): 14808-60-7
- Quartz (SiO2) <5µm: 14808-60-7

**NTP**
Known to be human carcinogen

- Quartz (SiO2): 14808-60-7
- Quartz (SiO2) <5µm: 14808-60-7

**Reproductive toxicity**
Not classified based on available information.
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 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 regulated

IATA
UN number 3082
Description of the goods Environmentally hazardous substance, liquid, n.o.s. (dibenzoyl peroxide, nonylbenzoate, branched and linear)
Class 9
Packing group III
Labels 9
Packing instruction (cargo aircraft) 964
Packing instruction 964
(passenger aircraft)
Packing instruction Y964
(passenger aircraft)

**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**: III
- **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 reporting requirements of SARA Title III, Section 302.

**SARA 313**: The following components are subject to reporting levels established by SARA Title III, Section 313:
- **dibenzoyl peroxide**: 94-36-0, 15.00 %
- **zinc distearate**: 557-05-1, 3.00 %
Clean Air Act

**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).

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 65**

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

16. Other information

**HMIS Classification**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>★</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>X</td>
</tr>
</tbody>
</table>

**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.

Revision Date 04/29/2015
Material number: 426081