F3: Epoxies

SAFETY DATA SHEET
(Complies with OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

The QUIKRETE® Companies
One Securities Centre
3490 Piedmont Road, Suite 1300
Atlanta, GA 30305
Emergency Telephone Number
(770) 216-9580
Information Telephone Number
(770) 216-9580

SDS F3A
Revision: Jun-15

NOTE: TWO SDS ARE REQUIRED FOR THESE PRODUCTS

QUIKRETE® Product Name | Item #(s)
------------------------|---------
ANCHORING EPOXY – FASTSET (PART A) | 8620-30
ANCHORING EPOXY – HIGH STRENGTH (PART A) | 8620-31

Product Use: Epoxies for anchoring objects to concrete.

SECTION II - HAZARD IDENTIFICATION

Hazard-determining components of labeling: Bisphenol-A, Ethylene Glycol

2.1 Classification of the substance or mixture
Skin Sensitization - Category 1
Skin Irritant - Category 2
Eye Irritant - Category 2A
Toxic to Aquatic Life – Category 2

2.2a Signal word Warning

2.2b Hazard Statements
May cause an allergic skin reaction
Causes skin irritation
Causes serious eye irritation
Very toxic to aquatic life with long lasting effects
2.2c Pictograms

2.2d Precautionary statements
Do not handle until all safety precautions have been read and understood.
Avoid contact with the skin and eyes
Avoid breathing fumes
Wear protective gloves, eye protection and clothing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If on skin (or hair): Remove immediately all contaminated clothing and wash before re-use. Rinse skin or hair with water.
If significant skin irritation or rash occurs: get medical advice or attention.
**Immediately seek medical advice or attention if symptoms are significant or persist.**

Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/containers in accordance with all regulations.

2.3 Additional Information
Carcinogenicity
This product contains titanium dioxide which IARC has classified as a Group 2B carcinogen (possibly carcinogenic to humans). Evidence is based on sufficient animal testing as a result of long-term inhalation at high concentrations of respirable amounts of titanium dioxide. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. Note: sanding of this product will create a possible dust hazard.

This product or one of its ingredients present at 0.1% or more IS listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

This product contains crystalline silica (quarts sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. Note: sanding of this product will create a possible silica dust hazard

2.3a HNOC – Hazards not otherwise classified: Not applicable
2.3b Unknown Acute Toxicity: 7% of this mixture is of unknown acute toxicity.

2.3C WHMIS Classification
   Class D2B – Skin/Eye Irritant

2.3d Label Elements According To WHMIS

Hazard Symbols

Signal Word
Warning!

SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS No.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglycidyl Ether of Bisphenol A</td>
<td>25085-99-8</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Quartz Silica Sand (Crystalline Silica)</td>
<td>14808-60-7</td>
<td>20 – 40</td>
</tr>
<tr>
<td>Trimethylol Ethane Triglycidyl Ether</td>
<td>68460-21-9</td>
<td>7 - 15</td>
</tr>
<tr>
<td>Non – Hazardous Proprietary Ingredients</td>
<td>Proprietary</td>
<td>3 – 7</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>1-5</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>1-5</td>
</tr>
</tbody>
</table>

*The concentrations ranges are provided due to batch-to-batch variability.

SECTION IV – FIRST AID MEASURES

4.1 Description of the first-aid measures

General information:

Inhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist.

Eyes: Immediately flush eyes with plenty of water for several minutes. Call a physician if symptoms persist.

Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

4.2 Most important symptoms/effects, acute and delayed

Inhalation: Not applicable

Skin contact: May cause an allergic skin reaction

Eye Contact: Causes serious eye irritation
Ingestion: Not applicable

4.3 Indication of immediate medical attention and special treatment needed:
Immediately seek medical advice or attention if symptoms are significant or persist.

SECTION V - FIRE FIGHTING MEASURES

5.1 Flammability of the Product: Flash point >149 °C (300 °F)
5.2 Suitable extinguishing agents: Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.
5.3 Special hazards arising from the substance or mixture: None known
5.3a Products of Combustion: None known
5.3b Explosion Hazards in Presence of Various Substances: None known

SECTION VI – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Wear personal protective equipment (See section VIII). Keep unprotected persons away.

6.2 Methods and material for containment and cleaning up:
Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting. Do not allow to enter sewers/surface or ground water. Dispose of unwanted materials and containers properly in accordance with all regulations.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

7.1 Handling
Precautions for safe handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling.

7.2 Storage
Requirements to be met by storerooms and receptacles: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature range in between 4 ºC and 35 ºC (40ºF and 95º F).
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep out of the reach of children.

SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION

8.1 Components with limit values that require monitoring at the workplace:
<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS No.</th>
<th>PEL (OSHA) mg/M³</th>
<th>TLV (ACGIH) mg/M³</th>
</tr>
</thead>
</table>
Ethylene Glycol 107-21-1 50 ppm (Ceiling) 100 (Ceiling)
Quartz Silica Sand (Crystalline Silica) 14808-60-7 0.1 0.025
Titanium Dioxide 13463-67-7 15 10

8.2 Exposure Controls
Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

8.3 General protective and hygienic measures
Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

8.3a Personal protective equipment

Protection of hands:
Wear gloves of adequate length to offer appropriate skin protection. Neoprene, nitrile rubber, or PVC gloves have been found to offer adequate protection for incidental contact.

Eye protection:
Wear approved eye protection properly fitted dust- or splash-proof chemical safety glasses.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White Paste</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight Odor</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1)</td>
<td>1.4</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>Non-Volatile</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC Content</td>
<td>7.84 g/l (when mixed)</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

SECTION X – STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.
10.2 Chemical stability
Stable under normal storage conditions.

10.3 Possibility of hazardous reaction
No dangerous reaction known under conditions of normal use.

10.4 Thermal decomposition / conditions to be avoided
Exposure to excessive heat and storage above 35 °C (95 °F) will shorten shelf life

10.5 Incompatible materials
Strong acids, peroxides and other oxidizing agents

10.6 Hazardous Decomposition or By-products
Can yield CO, CO₂ and organic Nitrogen compounds

SECTION XI – TOXICOLOGICAL INFORMATION

11. Toxicological Information (Part A)

Acute Oral Toxicity: Not Determined

Acute Dermal Toxicity: Not Determined

Acute Inhalation Toxicity: Not Determined

Skin Irritation: Irritating to skin. The product has not been tested. The statement has been derived from the properties of the individual components.

Eye Irritation: Irritating to eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Respiratory Irritation: Inhalation of vapors or mists may cause irritation to the respiratory system.

Sensitization: May cause allergic skin reaction and irritation to the respiratory system. The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity Classification:
Quartz Silica Sand (Crystalline Silica) - See Part A Section 2.

IARC Group1: Known human carcinogen based on human evidence.

NTP (National Toxicology Program) has classified Crystalline Silica as a known human carcinogen.

SECTION XII – ECOLOGICAL INFORMATION

12. Ecological Information (Part A)
Acute Toxicity for:
Fish:
Diglycidyl Ether of Bisphenol A:
Fathead minnow/LC50 (96hrs): >3.1mg/l

Aquatic Invertebrates:
Diglycidyl Ether of Bisphenol A:
Water Flea Daphnis/EC 50 (48hrs): > 1.4mg/l

Algae:
No Data Available

Microorganisms:
Diglycidyl Ether of Bisphenol A:
Bacteria, (Growth inhibition)/IC50 (18hrs): > 42.6mg/l

Mobility:
Considering the use of the substance, it is unlikely that significant environmental exposure in the air or water will arise.

SECTION XIII – DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method
If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

SECTION XIV – TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT (U.S.)</th>
<th>TDG (Canada)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Packing Group (if applicable)</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>

14.1 Environmental hazards:
Not Available

14.2 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code
Not available

14.3 Special precautions for user
Do not handle until all safety precautions have been read and understood.
SECTION XV – OTHER REGULATORY INFORMATION

Federal Regulations:
CERCLA RQ   CAS #  Chemical Name
5000 lbs    107-21-1    Ethylene Glycol

SARA Title 311/312   Chronic Health Hazard
TSCA   Listed

State Regulations:

State RTK   CAS #  Chemical Name
NJ, MA, PA  25085-99-8 Diglycidyl Ether of Bisphenol A
           107-21-1    Ethylene Glycol
           14808-60-7 Quartz Silica Sand (Crystalline Silica)
           13463-67-7 Titanium Dioxide

State Right to Know Laws
California Prop. 65 Components
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

15.5 NFPA Rating

SECTION XVI – OTHER INFORMATION

Last Updated: June 1, 2015
NOTE: The information and recommendations contained herein are based upon data believed to be 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 which may be caused by exposure to silica contained in our products.

Prepared by The QUIKRETE® Companies
Phone (800) 282-5828
www.QUICKRETE.com
End of SDS