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 F5A
Revision: Jun-16

QUIKRETE® Product Name
QUIKRETE® Epoxy Concrete Repair

Item #(s)
8620-49 (Part A)

Product Use: Non-sag repair epoxy

SECTION II - HAZARD IDENTIFICATION

Hazard Statements
Skin Irritant – 2
Eye Irritant - 2B
Skin Sensitizer - 1B
Carcinogen - 2

Pictograms

GHS Label elements, including precautionary statements

Signal word
Warning

Hazard statement(s)
May cause skin sensitization
Causes skin and eye irritation
May cause cancer
Wash skin thoroughly after handling
Avoid breathing fume/gas/mist/vapors/spray
Wear protective gloves/ protective clothing/ eye protection/ face protection
Use outdoors or in a well-ventilated area

**Primary Route of Exposure**
Eyes, skin and oral

**Carcinogenicity**
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.

### SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content %</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>25085-99-8</td>
<td>60 - 80</td>
<td>Diglycidyl Ether of Bisphenol A</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>0.5 – 1.5</td>
<td>Titanium Dioxide</td>
</tr>
<tr>
<td>Proprietary</td>
<td>10 - 25</td>
<td>Non – Hazardous Proprietary Ingredients</td>
</tr>
<tr>
<td>68460-21-9</td>
<td>7 - 15</td>
<td>Trimethylol Ethane Triglycidyl Ether</td>
</tr>
</tbody>
</table>

Exact concentrations have been withheld as a Trade Secret.

### SECTION IV – FIRST AID MEASURES

**Precautions**: First aid providers should avoid direct contact with this chemical. Wear protective equipment as necessary.

**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 at least 15 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.

**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

Flash Point: 149°C (>300°F)

Flammable Limits: N/A

Extinguisher Media: Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard: None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures: Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid all personal contact. In enclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions: Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

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.

Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature range in between 4 °C and 35 °C (40°F and 95°F).

SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>OSHA PEL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>15 mg/m³</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>
Engineering Measures: 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.

Personal Protective Equipment

Respiratory Protection
None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection
Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection
Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment
Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

These data do not represent technical or sales specifications.

Appearance: White Paste
Evaporation Rate: N/D
Odor: Slight Odor
Solubility in Water: Insoluble
Specific Gravity(g/cc): 1.36
Vapor Density(air = 1): Non-volatile
Vapor Pressure: N/D
VOC Content: See section 9 of part B for VOC content
pH: N/D
Boiling Point: N/D

SECTION X – STABILITY AND REACTIVITY

Stability: Stable

Thermal Decomposition: Can yield CO, CO₂ and organic Nitrogen compounds.

Incompatibility: Strong acids, peroxides, and other oxidizing agents
Conditions to avoid: Exposure to excessive heat and storage above 35°C (95°F) will shorten shelf life.

SECTION XI – TOXICOLOGICAL INFORMATION

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.

STOT – single exposure
Not Determined

STOT – Repeated Exposure
Not Determined

Carcinogenicity Classification:
Titanium Dioxide:
IARC Group 2B: Possibly carcinogenic to humans.
This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION XII – ECOLOGICAL INFORMATION

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

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></th>
<th>DOT (U.S.)</th>
<th>TDG (Canada)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN-Number</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<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>

SECTION XV – OTHER REGULATORY INFORMATION
Hazard Rating: 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

Federal Regulations

CERCLA RQ

SARA Title 311/312 Not Determined

CA Prop 65 This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

TSCA Listed or Exempt

State Regulations:

State RTK
NJ, MA, PA

CAS# Chemical Name
25085-99-8 Diglycidyl Ether of Bisphenol A
13463-67-7 Titanium Dioxide.

SECTION XVI – OTHER INFORMATION

Last Updated: June 24, 2016

MANUFACTURER DISCLAIMER: This SDS to the best of our knowledge conforms to the requirements of OSHA 29 CFR 1910.1200, 91/155/EEC and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Responsibility for the product sold
is subject to our standard terms and conditions, a copy if which is available upon request. This company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTEE, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS, OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. Liability by this company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with the proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users.

End of SDS
F5: 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 F5B
Revision: Jun-16

QUIKRETE® Product Name
QUIKRETE® Epoxy Concrete Repair 8620-49 (Part B)

Product Use: Non-sag repair epoxy

SECTION II - HAZARD IDENTIFICATION

Hazard Statements
Skin Corrosion Cat 1
Serious Eye Damage Cat 1
Reproductive toxicity Cat 2
Skin Sensitizer Cat 1B
Carcinogen Cat 1

Pictograms

GHS Label elements, including precautionary statements

Signal word Danger
Hazard statement(s)
Causes skin burns
Causes severe eye damage
Suspected of damaging fertility
May cause cancer
May be harmful if inhaled
Wash skin thoroughly after handling
Avoid breathing fume/gas/mist/vapors/spray
Wear protective gloves/ protective clothing/ eye protection/ face protection
Use outdoors or in a well-ventilated area
Avoid contact during pregnancy/while nursing

Primary Route of Exposure
Eyes, skin and oral

Carcinogenicity
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.

SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content%</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>140-31-8</td>
<td>5 - 15</td>
<td>N- Aminoethylpiperazine</td>
</tr>
<tr>
<td>112-24-3</td>
<td>1 – 5</td>
<td>Triethylenetetramine</td>
</tr>
<tr>
<td>107-21-1</td>
<td>1 – 5</td>
<td>Ethylene Glycol</td>
</tr>
<tr>
<td>84852-15-3</td>
<td>15 - 30</td>
<td>Nonylphenol</td>
</tr>
<tr>
<td>100-51-6</td>
<td>1 – 5</td>
<td>Benzyl Alcohol</td>
</tr>
<tr>
<td>90-72-2</td>
<td>3 - 7</td>
<td>Tris-2,4,6-(dimethylaminomethyl)phenol</td>
</tr>
<tr>
<td>Proprietary</td>
<td>10 – 20</td>
<td>Non – Hazardous Proprietary Ingredient</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>0.5 – 1.5</td>
<td>Crystalline Silica</td>
</tr>
</tbody>
</table>

Exact concentrations have been withheld as a Trade Secret.

SECTION IV – FIRST AID MEASURES

Precautions: First aid providers should avoid direct contact with this chemical. Wear protective equipment as necessary.

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 at least 15 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.

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

Flash Point: >93°C (200°F)
Flammable Limits: N/A

Extinguisher Media: Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard: None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures: Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid all personal contact. In enclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions: Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

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.

Storage: 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).

SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION
Exposure Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>OSHA PEL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>50 ppm (Ceiling)</td>
<td>100 mg/ m³ (Ceiling)</td>
</tr>
<tr>
<td>Quartz Silica Sand (Crystalline Silica)</td>
<td>14808-60-7</td>
<td>0.1 mg/m³</td>
<td>0.025 mg/m³</td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>100-51-6</td>
<td>50 ppm (Ceiling)</td>
<td>100 mg/m³</td>
</tr>
</tbody>
</table>

Engineering Measures: 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.

Personal Protective Equipment

Respiratory Protection
None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection
Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection
Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment
Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

These data do not represent technical or sales specifications.

- Appearance: Black Paste
- Evaporation Rate: N/A
- Odor: Slight Odor
- Solubility in Water: Insoluble
Specific Gravity(g/cc): N/A
Vapor Density(air = 1): Non-Volatile
Vapor Pressure: N/A
VOC Content: 1 g/L (tested per EPA CFR 40, Part 63, Subpart PPPP, Appendix A)
47 g/L (tested per EPA CFR 40, Part 60, method 24)
pH: N/D
Boiling Point: N/A

SECTION X – STABILITY AND REACTIVITY

Stability: Stable

Thermal Decomposition: Can yield CO, CO₂ and organic Nitrogen compounds.

Incompatibility: Strong acids, peroxides, and other oxidizing agents

Conditions to avoid: Exposure to excessive heat and storage above 35°C (95°F) will shorten shelf life.

SECTION XI – TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:
Not Determined

Acute Dermal Toxicity:
Not Determined

Acute Inhalation Toxicity:
Not Determined

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

Eye Irritation:
Severe damage 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):
IARC Group 1: Known human carcinogen based on human evidence.
NTP (National Toxicology Program) has classified Crystalline Silica as a known human carcinogen.

SECTION XII – ECOLOGICAL INFORMATION

At the present state of knowledge, no negative ecological effects are expected. Past experiences have shown this material to have no harmful effect on the environment.

SECTION XIII – DISPOSAL CONSIDERATIONS

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

SECTION XIV – TRANSPORT INFORMATION

DOT (US)

CARTRIDGE: Limited Quantity, LTD QTY
*BULK: AMINES, SOLID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8,
UN 3259, PG III

*Bulk packaging in quantities of 1.3 gallons (net) or less are packaged in accordance with the limited quantity exception.

IATA/ICAO

CARTRIDGE/BULK: AMINES, SOLID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 3259, PG III

IMDG

CARTRIDGE/BULK: AMINES, SOLID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 3259, PG III

Marine pollutant: yes
SECTION XV – OTHER REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th></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>PPE</td>
<td>B</td>
</tr>
</tbody>
</table>

**NFPA Rating**

**Hazard Rating:** 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

**Federal Regulations**

- **CERCLA RQ**
  - 5000 lbs
- **CAS**
  - 107-21-1 Ethylene Glycol
- **SARA Title 311/312**
  - Chronic Health Hazard
- **CA Prop 65**
  - This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- **TSCA**
  - Listed

**State Regulations:**

- **State RTK**
  - NJ, MA, PA
- **CAS#**
  - 107-21-1 Ethylene Glycol
  - 14808-60-7 Quartz Silica Sand (Crystalline Silica)
  - 140-31-8 n-aminoethylpiperazine
  - 14807-96-6 Hydrous Magnesium silicate

SECTION XVI – OTHER INFORMATION

Last Updated: June 24, 2016
MANUFACTURER DISCLAIMER: This SDS to the best of our knowledge conforms to the requirements of OSHA 29 CFR 1910.1200, 91/155/EEC and summarizes the health and safety hazard information and general guidance on how to safety handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Responsibility for the product sold is subject to our standard terms and conditions, a copy if which is available upon request. This company warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTEE, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS, OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE MERCHANTABILITY OR SUITABILITY OR FITNESS OF ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE, OR THAT ANY CHEMICAL COMPOUNDS OR OTHER PRODUCTS OR THE USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. Liability by this company for all claims, whether arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material. Products may be toxic and require special precautions in handling. For all products listed, the user should obtain detailed information on toxicity, together with the proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards. Toxicity and risk characteristics of chemical compounds and other products may differ when used with other materials or in a manufacturing or other process. Those risk characteristics should be determined by the user and made known to handlers, processors, and end users.

End of SDS