

## SAFETY DATA SHEET

### Section 1. Product And Company Identification

**Product Name:** Maxcem Elite

**Product Use:** Dental product: Permanent cement

**Manufacturer:** Kerr Corporation  
1717 W. Collins Ave.  
Orange, CA 92867-5422  
U.S.A.

**Information Phone Number:** 1-800-841-1428 (Customer Service)

**Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):**  
CHEMTREC 1-800-424-9300 (in the US) 1-703-527-3887 (Outside the US)

**SDS Date of Preparation/Revision:** April 12, 2019

### Section 2. Hazards Identification

**GHS Classification:**

Skin Irritation Category 2

Eye Irritation Category 2A

Specific Target Organ Toxicity Single Exposure Category 3

**Label Elements:**

Warning!



**Hazard Phrases**

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

**Precautionary Phrases:**

Avoid breathing vapors.

Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves and eye or face protection.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor 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 attention.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

### Section 3. Composition/Information on Ingredients

| Component  | CAS No.    | Amount |
|--|------------|--------|
| Barium aluminoborosilicate glass   | 65997-17-3 | 30-60% |
| Ytterbium fluoride   | 13760-80-0 | 10-30% |
| 1,6-hexanediyl bismethacrylate   | 6606-59-3  | 5-10%  |
| 2-hydroxy-1,3-propanediyl bismethacrylate  | 1830-78-0  | 5-10%  |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate | 72869-86-4 | 1-5%   |
| 3-trimethoxysilylpropyl methacrylate   | 2530-85-0  | 1-5%   |
| Fumed silica   | 68909-20-6 | 1-5%   |

### Section 4. First Aid Measures

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell.

**Skin Contact:** Remove contaminated clothing and shoes. Flush skin thoroughly with water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get medical attention if irritation occurs and persists.

**Ingestion:** If swallowed, rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor if you feel unwell.

**Most important symptoms and effects, acute and delayed:** Causes skin irritation and serious eye irritation. Inhalation may cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Ingestion may be irritating to mouth, throat and stomach.

**Indication of immediate medical attention and special treatment, if needed:** Treat symptomatically.

### Section 5. Fire Fighting Measures

**Suitable (and Unsuitable) Extinguishing Media:** Use any media appropriate for the surrounding fire. Cool fire exposed containers with water.

**Specific Hazards Arising from the Chemical:** Combustion may produce carbon dioxide, carbon monoxide, nitrogen oxides, phosphorus oxides, halogenated compounds, and metal oxides.

**Special Protective Equipment and Precautions for Fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool fire-exposed containers with water. Contain water used in firefighting from entering sewers or natural waterways.

## Section 6: Accidental Release Measures

**Personal precautions, Protective equipment, and Emergency procedures:** Evacuate spill area and keep unprotected personnel away. Avoid contact with eyes, skin and clothing. Wear appropriate protective clothing and equipment. Avoid breathing dust and vapors from dried paste.

**Environmental Precautions:** Avoid releases to the environment. Report spill as required by local and federal regulations.

**Methods and Materials for Containment and Cleaning up:** Prompt cleanup and removal are necessary. Absorb spills with an inert material and place in an appropriate waste disposal container.

## Section 7. Handling and Storage

**Precautions for Safe Handling:** Prevent contact with eyes, skin and clothing. Always wear impervious gloves, chemical safety goggles and protective clothing when handling this material. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke in the work area. Do not breathe dust or vapors. Use with adequate ventilation. Remove and wash contaminated clothing before reuse.

Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, dry, well-ventilated area away from direct sunlight. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

## Section 8. Exposure Controls / Personal Protection

### Exposure Limits

| Chemical   | Exposure Limit   |
|--|--|
| Barium aluminoborosilicate glass   | 10 mg/m <sup>3</sup> TWA ACGIH TLV (total)<br>5 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable fraction) |
| Ytterbium fluoride   | 2.5 mg/m <sup>3</sup> TWA ACGIH TLV  |
| 1,6-hexanediyl bismethacrylate   | None Established   |
| 2-hydroxy-1,3-propanediyl bismethacrylate  | None Established   |
| 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate | None Established   |
| 3-trimethoxysilylpropyl methacrylate   | None Established   |
| Fumed silica (as amorphous silica)   | 10 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable)<br>3 mg/m <sup>3</sup> TWA ACGIH TLV (respirable)     |

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

**Respiratory Protection:** None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with particulate cartridges

is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**Hand protection:** Impervious gloves are suggested to prevent skin contact. Contact your glove supplier for selection assistance.

**Eye Protection:** Chemical safety goggles are recommended if contact is possible.

**Skin Protection:** Wear protective clothing as needed to avoid skin contact and contamination of personal clothing.

**Hygiene measures:** Suitable eye and skin washing facilities should be available in the work area.

## Section 9. Physical and Chemical Properties

|   |                       |                                  |  |
|---|-----------------------|----------------------------------|--|
| <b>Appearance:</b>                              | Various colored paste | <b>Odor:</b>                     | Slight peppermint-like                     |
| <b>Odor Threshold:</b>                          | Not available         | <b>pH:</b>                       | Not available                              |
| <b>Melting/Freezing Point:</b>                  | Not available         | <b>Boiling Point/Range:</b>      | Not available                              |
| <b>Flash Point:</b>                             | Not flammable         | <b>Evaporation Rate:</b>         | Not available                              |
| <b>Flammability: (Solid, Gas)</b>               | Not applicable        | <b>Flammability Limits:</b>      | LEL: Not applicable<br>UEL: Not applicable |
| <b>Vapor Pressure:</b>                          | Not available         | <b>Vapor Density:</b>            | Not available                              |
| <b>Relative Density:</b>                        | 2                     | <b>Solubilities:</b>             | Insoluble in water                         |
| <b>Partition Coefficient: (N-Octanol/Water)</b> | Not available         | <b>Autoignition Temperature:</b> | Not available                              |
| <b>Decomposition Temperature:</b>               | Not available         | <b>Viscosity:</b>                | Not available                              |

## Section 10. Stability and Reactivity

**Reactivity:** The product is not expected to be reactive.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to avoid:** Avoid heat and direct sunlight. Heat can cause polymerization with rapid release of energy.

**Incompatible Materials:** Oxidizing materials, reducing materials, peroxides, and amines.

**Hazardous decomposition products:** None if stored normally.

## Section 11. Toxicological Information

### Potential Health Effects:

**Inhalation:** May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes serious eye irritation.

**Ingestion:** May be irritating to mouth, throat and stomach.

**Chronic Hazards:** None expected.

**Skin Sensitization:** Product is categorized in Grade I (weak sensitizer) in Kligman test.

**Respiratory Sensitization:** No data available. This product is not expected to cause respiratory sensitization.

**Germ Cell Mutagenicity:** None of the components have shown mutagenic activity in animal studies.

**Carcinogen:** None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

**Developmental / Reproductive Toxicity:** None of the components have been shown to cause reproductive or developmental toxicity.

**Specific Target Organ Toxicity (Single Exposure):** Single exposure to 1,6-hexanediyl bismethacrylate, 2-hydroxy-1,3-propanediyl bismethacrylate, and 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate may cause respiratory tract irritation.

**Specific Target Organ Toxicity (Repeated Exposure):** No data available.

**Aspiration Toxicity:** Not an aspiration hazard.

**Acute Toxicity Values:**

Ytterbium fluoride: Oral rat LD50: >2000 mg/kg

3-trimethoxysilylpropyl methacrylate: LD50 Oral rat: 23504 mg/kg

Fumed silica: Oral rat LD50: >5000 mg/kg, Inhalation rat LC0: >0.139 mg/L/4hr (no mortality), Skin rat LD50: >5000 mg/kg

## Section 12. Ecological Information

**Toxicity:**

Ytterbium fluoride: 48 hr EC50 Daphnia magna: >0.52 mg/L

7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate:

72 hr EC50 Desmodesmus subspicatus 0.6 mg/L; 48 hr EC50 Daphnia magna 1.2 mg/L

**Persistence and degradability:** Biodegradation is not applicable to inorganic substances.

**Bioaccumulative Potential:**

7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate:

log P<sub>ow</sub> 3, potential for bioaccumulative is low.

3-trimethoxysilylpropyl methacrylate: log P<sub>ow</sub> 2.1, potential for bioaccumulative is low.

**Mobility in Soil:** No data available.

**Other Adverse Effects:** No data available.

## Section 13. Disposal Considerations

**Disposal:** For unused product, dispose of in accordance with Federal and local regulations.

**Container Disposal:** Dispose of empty container in accordance with Federal and local regulations.

## Section 14. Transport Information

|                   | UN Number | UN Proper Shipping Name | Hazard Class(s) | Packing Group | Environmental Hazards |
|-------------------|-----------|-------------------------|-----------------|---------------|-----------------------|
| <b>US DOT</b>     | None      | Not Regulated           | None            | None          | None                  |
| <b>EU ADR/RID</b> | None      | Not Regulated           | None            | None          | None                  |
| <b>IMDG</b>       | None      | Not Regulated           | None            | None          | None                  |
| <b>IATA/ICAO</b>  | None      | Not Regulated           | None            | None          | None                  |

**Special Precautions for User:** None identified

**Transport in Bulk According to Annex II MARPOL 73/78 and the IBC Code:** Not applicable – product is transported only in packaged form.

## Section 15. Regulatory Information

### U.S. Federal Regulations:

**EPA SARA 311/312 Hazard Classification:** Refer to Section 2 for OSHA Hazard Classification.

**EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):** None

**Protection Of Stratospheric Ozone:** This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

**CERCLA SECTION 103:** This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

### International Inventories

**US EPA TSCA Inventory:** All of the components of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or exempt.

**Canada CEPA:** All of the components of this material are listed on the DSL or exempt.

## Section 16. Other Information

**Effective Date:** April 12, 2019

**Supersedes Date:** October 27, 2014

**Revision Summary:** All Sections – New SDS format

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, KERR Corporation makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.