

## SAFETY DATA SHEET

### Section 1. Product And Company Identification

**Product Name:** Silane Primer

**Product Use:** Dental product: Dental restoration

**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 1, 2019

### Section 2. Hazards Identification

**GHS Classification:**

Flammable Liquid Category 2

Skin Irritation Category 2

Skin Sensitization Category 1

Eye Irritation Category 2A

Specific Target Organ Toxicity Single Exposure Category 3

Specific Target Organ Toxicity Repeated Exposure Category 2

**Label Elements:**

Danger!



**Hazard Phrases**

Highly flammable liquid and vapor.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

May cause drowsiness and dizziness.

Causes damage to organs through prolonged or repeated exposure.

**Precautionary Phrases:**

Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

Keep container tightly closed.

Use explosion-proof electrical, ventilating, lighting, and all material-handling equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.  
 Do not breathe vapors.  
 Wash exposed skin thoroughly after handling.  
 Wear protective gloves and eye protection.  
 Contaminated work clothing should not be allowed out of the workplace.  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 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.  
 In case of fire: Use water fog, alcohol foam carbon dioxide or dry chemical to extinguish.  
 Store in a well ventilated place.  
 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
Ethanol	64-17-5	60-100%
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	1565-94-2	5-10%
Poly(oxy-1,2-ethanediyl), $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-	41637-38-1	1-5%
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	1-5%
3-trimethoxysilylpropyl methacrylate	2530-85-0	1-5%

### Section 4. First Aid Measures

**Inhalation:** Move to fresh air if symptoms occur and seek medical attention if symptoms persist.

**Skin Contact:** Take off contaminated clothing. Rinse skin with plenty of water. Get medical attention if irritation develops and persists.

**Eye Contact:** Hold eye open and rinse slowly and gently with water for several minutes. Remove contact lenses, if present, then continue rinsing. Get medical attention if irritation persists.

**Ingestion:** If swallowed, rinse mouth with water. If symptoms develop, get medical attention.

**Most important symptoms and effects, acute and delayed:** Causes moderate to severe eye irritation. Skin contact may cause dryness and irritation. May cause allergic skin reaction (sensitization.) Ingestion can cause central nervous system depression and irritating to mouth, throat and stomach. Inhalation may cause drowsiness and dizziness.

**Indication of immediate medical attention and special treatment, if needed:** Immediate medical attention is not required.

## 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, 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. Do not breathe vapors.

**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. For small spills, take up in non-combustible absorbent material and shovel into container for disposal. For large spills, scoop solid spill into closing containers. This material and its container must be disposed of in a safe way, and as per local legislation. Notify authorities if product enters sewers or public waters. Wash off with plenty of water.

## 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 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
Ethanol	1000 ppm TWA OSHA PEL 1000 ppm STEL ACGIH TLV

(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	None Established
Poly(oxy-1,2-ethanediyl), $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-	None Established
2,2'-ethylenedioxydiethyl dimethacrylate	None Established
3-trimethoxysilylpropyl methacrylate	None Established

**Appropriate Engineering Controls:** General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, mechanical ventilation such as local exhaust may be needed to minimize exposure. Use explosion proof electrical equipment and wiring where required.

**Respiratory Protection:** None under normal use conditions with adequate ventilation. For operations where the occupational exposure limits are exceeded, an approved respirator with a respirable dust cartridge or supplied air respirator 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>	Pale yellow liquid	<b>Odor:</b>	Alcohol-like odor
<b>Odor Threshold:</b>	Not available	<b>pH:</b>	Not available
<b>Melting/Freezing Point:</b>	Not available	<b>Boiling Point/Range:</b>	78.5°C (173.3°F)
<b>Flash Point:</b>	13°C (55.4°F) (Closed cup)	<b>Evaporation Rate:</b>	Not available
<b>Flammability: (Solid, Gas)</b>	Not applicable	<b>Flammability Limits:</b>	LEL: 4.3% UEL: 19%
<b>Vapor Pressure:</b>	5.3 kPa (40 mmHg at room temperature)	<b>Vapor Density:</b>	1.59 kg/m <sup>3</sup>
<b>Relative Density:</b>	0.85	<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 all possible sources of ignition (spark or flame). Do not polymerize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

**Incompatible Materials:** Oxidizing materials.

**Hazardous decomposition products:** Thermal decomposition will produce mercury oxide, mercury vapors, and metal oxides.

## Section 11. Toxicological Information

### Potential Health Effects:

**Inhalation:** Can cause central nervous system depression. May cause drowsiness, dizziness, and respiratory irritation.

**Skin Contact:** Defatting to the skin. May cause skin dryness and irritation.

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

**Ingestion:** Can cause central nervous system depression. May be irritating to mouth, throat and stomach.

**Chronic Hazards:** May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Skin Sensitization:** No adverse effects expected. Components are not sensitizers.

**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:** Ethanol is listed as "Carcinogenic to Humans" (Group 1) by IARC. None of the other 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 ethanol, Poly(oxy-1,2-ethanediyl),  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, 2,2'-ethylenedioxydiethyl dimethacrylate may cause respiratory tract irritation. Single exposure to ethanol may also cause narcotic effects.

**Specific Target Organ Toxicity (Repeated Exposure):** Repeated exposure to methanol may cause damage to the liver.

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

### Acute Toxicity Values:

Ethanol: LD50 Oral rat: 7060 mg/kg; LC50 Inhalation rat: 124.7 mg/L/4 hr

Poly(oxy-1,2-ethanediyl),  $\alpha,\alpha'$ -[(1-methylethylidene)di-4,1-phenylene]bis[ $\omega$ -[(2-methyl-1-oxo-2-propen-1-yl)oxy]-: LD50 Oral rat: >2000 mg/kg; LD50 Dermal rat: >2000 mg/kg

2,2'-ethylenedioxydiethyl dimethacrylate: LD50 Oral rat: 10837 mg/kg

3-trimethoxysilylpropyl methacrylate: LD50 Oral rat: 23504 mg/kg; LD50 Dermal rabbit: >15000 mg/kg

## Section 12. Ecological Information

### Toxicity:

Ethanol: 96 hr EC50 *Ulva pertusa* 17.921 mg/L; 48 hr EC50 *Daphnia magna*- 2000 µg/L;  
48 hr LC50 Crustaceans 25.5 mg/L; 96 hr LC50 *Oncorhynchus mykiss* >10000 µg/L  
Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-: 96 hr LD50 Fish >100 mg/L; 48 hr EC50 *Daphnia magna* >100 mg/L; 72 hr Algae >100 mg/L

**Persistence and degradability:** Ethanol is readily biodegradable.

### Bioaccumulative Potential:

Ethanol: log P<sub>ow</sub> -0.35, potential for bioaccumulative is low.  
Poly(oxy-1,2-ethanediyl), α,α'-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propen-1-yl)oxy]- has a BCF of 2372, log P<sub>ow</sub> 3.43 – 5.62, potential for bioaccumulative is high.  
2,2'-ethylenedioxydiethyl dimethacrylate: log P<sub>ow</sub> 1.88, 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
US DOT	UN1170	Ethanol solution	3	II	None
EU ADR/RID	UN1170	Ethanol solution	3	II	None
IMDG	UN1170	Ethanol solution	3	II	None
IATA/ICAO	UN1170	Ethanol solution	3	II	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.

<b>Section 16. Other Information</b>
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**Effective Date:** April 1, 2019

**Supersedes Date:** March 26, 2015

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

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