SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Harmonize
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: January 02, 2019

Section 2. Hazards Identification

GHS Classification:
Skin Irritation Category 2
Eye Irritation Category 2A
Specific Target Organ Toxicity Single Exposure Category 3
Aquatic Chronic Toxicity Category 2

Label Elements:
Warning!

Hazard Phrases
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.

Precautionary Phrases:
Avoid breathing vapor.
Wash hands thoroughly after handling.
Avoid release to the environment.
Wear eye protection, protective gloves.
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.
Call a POISON CENTER or doctor/physician if you feel unwell.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents and container in accordance with all local, regional, national and international regulations.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), α,α’-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[2-methyl-1-oxo-2-propen-1-yl]oxy]-</td>
<td>41637-38-1</td>
<td>25-50%</td>
</tr>
<tr>
<td>3-trimethoxysilylpropyl methacrylate</td>
<td>2530-85-0</td>
<td>&lt; 5%</td>
</tr>
<tr>
<td>2,2'-ethylenedioxydiethyl dimethacrylate</td>
<td>109-16-0</td>
<td>&lt; 3%</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

**Inhalation:** Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

**Skin Contact:** Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before re-use.

**Eye Contact:** Rinse thoroughly with water. Get medical attention if irritation occurs and persists.

**Ingestion:** Do NOT induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Keep the victim calm and warm. Get immediate medical attention.

**Most important symptoms and effects, acute and delayed:** Causes serious eye irritation and skin irritation. May cause respiratory irritation.

**Indication of immediate medical attention and special treatment, if needed:** Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

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, 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.

**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**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), α,α’-[[(1-methylethylenediene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-</td>
<td>None Established</td>
</tr>
<tr>
<td>3-trimethoxysilylpropyl methacrylate</td>
<td>None Established</td>
</tr>
<tr>
<td>2,2’-ethylenedioxydiethyl dimethacrylate</td>
<td>None Established</td>
</tr>
</tbody>
</table>

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

**Respiratory Protection:** In operations where exposure levels are exceeded, an approved dust/mist respirator or supplied air respirator should be used. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice.

**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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Various colored paste</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting/Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.97</td>
</tr>
<tr>
<td>Partition Coefficient (N-Octanol/Water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor</td>
<td>Fruity ester</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point/Range:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (Solid, Gas) Limits:</td>
<td>LEL: Not applicable</td>
</tr>
<tr>
<td></td>
<td>UEL: Not applicable</td>
</tr>
<tr>
<td>Flammability (Solid, Gas) Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubilities</td>
<td>Insoluble in water</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 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: None under recommended storage and handling conditions.

Incompatible Materials: Oxidizing materials and reducing materials, amine, peroxide.

Hazardous decomposition products: None if stored normally.

### Section 11. Toxicological Information

Potential Health Effects:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: May cause gastrointestinal irritation and nausea.

Chronic Hazards: None expected.

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 are mutagenic.
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): May cause respiratory irritation.

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

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:
Poly(oxy-1,2-ethanediyl), α,α′-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propen-1-yl)oxy]:: LD50 Oral rat: > 2000 mg/kg; LD50 Dermal rat: > 2000 mg/kg
3-trimethoxysilylpropyl methacrylate: LD50 Oral rat: 23504 mg/kg
2,2′-ethylenedioxydiethyl dimethacrylate: LD50 Oral rat: 10837 mg/kg

Section 12. Ecological Information

Toxicity:
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

This product is classified as very toxic to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

Persistence and degradability: 2,2′-ethylenedioxydiethyl dimethacrylate is readily diodegradable.

Bioaccumulative Potential:
Poly(oxy-1,2-ethanediyl), α,α′-[(1-methylethylidene)di-4,1-phenylene]bis[ω-[(2-methyl-1-oxo-2-propen-1-yl)oxy]:: log P<sub>ow</sub> 3.43 to 5.62, potential for bioaccumulative is high
3-trimethoxysilylpropyl methacrylate: log P<sub>ow</sub> 2.1, potential for bioaccumulative is low
2,2′-ethylenedioxydiethyl dimethacrylate: log P<sub>ow</sub> 1.88, 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

<table>
<thead>
<tr>
<th></th>
<th>UN Number</th>
<th>UN Proper Shipping Name</th>
<th>Hazard Class(s)</th>
<th>Packing Group</th>
<th>Environmental Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>US DOT</td>
<td>UN3082</td>
<td>Environmentally hazardous substance, liquid, n.o.s.</td>
<td>9</td>
<td>III</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Special Precautions for User: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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: January 3, 2019
Supersedes Date: May 7, 2018
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.