SAFETY DATA SHEETS

This SDS packet was issued with item: 070577163

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

070573014 070573022 070573147 070573154 070573279 070573287 070573402 070573410 070573535 070573543 070573667 070573675 070573790 070573808 070573923 070573931 070574053 070574061 070574186 070574194 070574319 070574327 070574442 070574459 070574467 070574582 070574590 070574848 070574855 070574988 070575373 070575381 070576629 070576637 070576686 070576694 070576744 070576751 070576801 070576819 070576868 070576876 070576926 070576934 070577171 070577189 070577197 070577270 070577288 070577320 070577379 070577411 070577429 070577460 070577478 070577510 070577528 070577700 070752626



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)

<u>Chemical Emergency Phone Number (Chemical Spills, Leaks, Fire, Exposure or Accident only):</u> 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:



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.

Section 3. Composition/Information on Ingredients

Component	CAS No.	Amount
Poly(oxy-1,2-ethanediyl), α,α'-[(1-	41637-38-1	25-50%
methylethylidene)di-4,1-phenylene]bis[ω-[(2-		
methyl-1-oxo-2-propen-1-yl)oxy]-		
3-trimethoxysilylpropyl methacrylate	2530-85-0	< 5%
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	< 3%

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

Chemical	Exposure Limit
Poly(oxy-1,2-ethanediyl), α,α'-[(1-	None Established
methylethylidene)di-4,1-phenylene]bis[ω-[(2-	
methyl-1-oxo-2-propen-1-yl)oxy]-	
3-trimethoxysilylpropyl methacrylate	None Established
2,2'-ethylenedioxydiethyl dimethacrylate	None Established

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				
Appearance:	Various colored paste	Odor:	Fruity ester	
Odor Threshold:	Not available	pH:	Not available	
Melting/Freezing Point:	Not available	Boiling Point/Range:	Not available	
Flash Point:	Not flammable	Evaporation Rate:	Not available	
Flammability: (Solid, Gas)	Not applicable	Flammability Limits:	LEL: Not applicable UEL: Not applicable	
Vapor Pressure:	Not available	Vapor Density:	Not available	
Relative Density:	1.97	Solubilities:	Insoluble in water	
Partition Coefficient: (N-Octanol/Water)	Not available	Autoignition Temperature:	Not available	
Decomposition Temperature:	Not available	Viscosity:	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: 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-1yl)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_{ow} 3.43 to 5.62, potential for bioaccumulative is high 3-trimethoxysilylpropyl methacrylate: log P_{ow} 2.1, potential for bioaccumulative is low 2,2'-ethylenedioxydiethyl dimethacrylate: log P_{ow} 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.

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	UN3082	Environmentally hazardous substance, liquid, n.o.s.			Yes

Section 14. Transport Information



EU ADR/RID	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9		Yes
IMDG	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9		Yes
IATA/ICAO	UN3082	Environmentally hazardous substance, liquid, n.o.s.	9		Yes

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.