

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

074298931

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

074298873

## SAFETY DATA SHEET

### Section 1. Product And Company Identification

**Product Name:** OptiBond™ FL Prime

**Product Use:** Dental product: Primer

**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:** February 7, 2019

### Section 2. Hazards Identification

**GHS Classification:**

Flammable Liquids Category 2

Skin Corrosion Category 1B

Serious Eye Damage/Eye Irritation Category 1

Skin Sensitization Category 1

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 serious eye damage.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

May cause drowsiness and dizziness.

May cause 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 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/protective clothing/eye protection/face protection.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation or a rash occurs: Get medical attention.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/ 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. Immediately call a POISON CENTER or doctor.  
Store in a well-ventilated place. Keep container tightly closed.  
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 |
|---------------------------------------------------|------------|--------|
| 2-hydroxyethyl methacrylate                       | 868-77-9   | 10-30% |
| Ethanol                                           | 64-17-5    | 10-30% |
| 2-[2-(methacryloyloxy)ethoxycarbonyl]benzoic acid | 27697-00-3 | 10-30% |
| Glycerol phosphate dimethacrylate                 | N/A        | 5-10%  |

### Section 4. First Aid Measures

**Inhalation:** Remove victim to fresh air. If breathing is difficult or irritation persists, get medical attention.

**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:** Immediately flush eyes with large quantities of water for several minutes, while holding the eyelids apart. Remove contact lenses if easy to do so. Continue rinsing. Get medical attention if irritation persists.

**Ingestion:** Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if you feel unwell.

**Most important symptoms and effects, acute and delayed:** Causes serious eye damage and skin irritation. May cause an allergic skin reaction. Inhalation of vapor can cause central nervous system depression, may cause drowsiness, dizziness, and respiratory irritation.

**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 phosphorus 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. Contain water used in firefighting from entering sewers or natural waterways.

## Section 6: Accidental Release Measures

**Personal precautions, Protective equipment, and Emergency procedures:** Avoid contact with eyes, skin and clothing. Wear appropriate protective clothing and equipment. Do not breathe dust or 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:** Collect material with an inert absorbent material and place in appropriate, labeled container for disposal.

## 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         |
|---------------------------------------------------|------------------------|
| 2-hydroxyethyl methacrylate                       | None Established.      |
| Ethanol                                           | 1000 ppm TWA NIOSH REL |
| 2-[2-(methacryloyloxy)ethoxycarbonyl]benzoic acid | None Established.      |
| Glycerol phosphate 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

|                                                 |                                   |                                  |                                          |
|-------------------------------------------------|-----------------------------------|----------------------------------|------------------------------------------|
| <b>Appearance:</b>                              | Light yellow liquid               | <b>Odor:</b>                     | Fruity                                   |
| <b>Odor Threshold:</b>                          | Not available                     | <b>pH:</b>                       | 2                                        |
| <b>Melting/Freezing Point:</b>                  | Not available                     | <b>Boiling Point/Range:</b>      | 78°C (Ethanol)                           |
| <b>Flash Point:</b>                             | 18°C (64.4°F) (Ethanol)           | <b>Evaporation Rate:</b>         | Not available                            |
| <b>Flammability: (Solid, Gas)</b>               | Highly flammable liquid and vapor | <b>Flammability Limits:</b>      | LEL: Not available<br>UEL: Not available |
| <b>Vapor Pressure:</b>                          | Not available                     | <b>Vapor Density:</b>            | Not available                            |
| <b>Relative Density:</b>                        | 0.96                              | <b>Solubilities:</b>             | Soluble 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:** Thermal decomposition generates corrosive vapors.

**Chemical Stability:** Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

**Possibility of Hazardous Reactions:** No dangerous reactions known under normal conditions of use.

**Conditions to avoid:** Avoid flames, sparks, all sources of ignition, direct sunlight, extremely high or low temperatures.

**Incompatible Materials:** Oxidizing materials.

**Hazardous decomposition products:** Thermal decomposition may release flammable gases.

## Section 11. Toxicological Information

**Potential Health Effects:**

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

**Skin Contact:** Direct contact causes skin irritation and may cause an allergic skin reaction.

**Eye Contact:** Direct contact causes serious eye damage.

**Ingestion:** Ingestion can cause central nervous system depression and may cause burns to mouth, throat and stomach.

**Chronic Hazards:** Prolonged or repeated exposure to ethanol may cause damage to organs. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Skin corrosion/irritation:** This product is expected to cause severe skin burns.

**Eye damage/ irritation:** This product is expected to cause serious eye damage.

**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:** No data available.

**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 tract irritation.

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

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

#### Acute Toxicity Values:

Product ATE: 10434.1 mg/kg (Oral)

2-hydroxyethyl methacrylate: LD50 Oral rat: 5050 mg/kg; LD50 Dermal rabbit: >3000 mg/kg

Ethanol: LD50 Oral rat: 7060 mg/kg; LD50 Dermal rabbit: >20000 mg/m<sup>3</sup>;

LC50 Inhalation rat: 124.700 mg/L/4 hr

## Section 12. Ecological Information

#### Toxicity:

2-hydroxyethyl methacrylate: 96 hr LC50 Pimephales promelas 227 mg/L;

72 hr IC50 Algae 836 mg/L; 48 hr EC50 Daphnia magna >280 mg/L

Ethanol: 96 hr LC50 Pimephales promelas 13500 mg/L; 48 hr EC50 Daphnia magna 2000 µg/L;

48 hr LC50 Crustaceas 25500 µg/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:** Product is readily biodegradable.

**Bioaccumulative Potential:**

2-hydroxyethyl methacrylate has a BCF of 1.3 – 1.5, log  $P_{ow}$  0.42, potential for bioaccumulative is low.  
Ethanol: log  $P_{ow}$  -0.35, 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 mixture         | 3               | II            | None                  |
| EU ADR/RID | UN1170    | Ethanol mixture         | 3               | II            | None                  |
| IMDG       | UN1170    | Ethanol mixture         | 3               | II            | None                  |
| IATA/ICAO  | UN1170    | Ethanol mixture         | 3               | II            | None                  |

**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.

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| <b>Section 16. Other Information</b> |
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**Effective Date:** February 7, 2019

**Supersedes Date:** November 25, 2013

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

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