SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Die Sealer/Hardener
Product Use: Dental product: Sealant

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 14, 2019

Section 2. Hazards Identification

GHS Classification:
Flammable Liquid Category 2
Skin Irritation Category 2
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 serious eye irritation.
Causes skin irritation.
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/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe vapor.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN: Take off contaminated clothing.
Wash with plenty of water.
If skin irritation occurs: Get medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER 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 advice/attention.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

### Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone</td>
<td>78-93-3</td>
<td>30-60%</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:** Can cause central nervous system depression. May cause drowsiness and dizziness. May cause respiratory irritation. Causes serious eye irritation and skin irritation.

**Indication of immediate medical attention and special treatment, if needed:** Immediate medical attention is required if large quantities have been ingested or inhaled.

### 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 and carbon monoxide.
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. Clean up any spills as soon as possible, using an absorbent material to collect it. 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. 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>Butanone</td>
<td>590 mg/m³ TWA OSHA PEL</td>
</tr>
<tr>
<td></td>
<td>885 mg/m³ STEL ACGIH TLV</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: 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</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>Closed cup: -4°C (24.8°F)</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>10.5 kPa (78.756 mmHg) at room temperature</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.9</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>Solvent</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>79°C (174.2°F)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>LEL: Not applicable</td>
</tr>
<tr>
<td>Vapor 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: Avoid all possible sources of ignition, heat, and direct sunlight.

Incompatible Materials: Oxidizing materials and reducing materials.

Hazardous decomposition products: None if stored normally.

### Section 11. Toxicological Information

Potential Health Effects:

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

Skin Contact: causes skin irritation. Defatting to the skin.

Eye Contact: Causes serious eye irritation.

Ingestion: Can cause central nervous system depression.

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 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 butanone may cause respiratory tract irritation and Narcotic effects.

Specific Target Organ Toxicity (Repeated Exposure): Repeated exposure to butanone may cause effects on the kidneys.

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:
Product ATE: 4708.2 mg/kg (Oral)  
Butanone: LC50 Inhalation rat: 11243 ppm; LD50 Oral rat: 2737 mg/kg; LD50 Dermal rabbit: 6480 mg/kg

Section 12. Ecological Information

Toxicity:  
Butanone: 96 hr EC50 Skeletonema costatum > 500000 µg/L; 48 hr LC50 Daphnia magna 520000 µg/L; 96 hr LC50 Cyprinodon variegatus 400 ppm

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

Bioaccumulative Potential: Butanone: log P_{ow} 0.3, 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>UN1193</td>
<td>Methyl ethyl ketone solution</td>
<td>3</td>
<td>II</td>
<td>No</td>
</tr>
<tr>
<td>EU ADR/RID</td>
<td>UN1193</td>
<td>Methyl ethyl ketone solution</td>
<td>3</td>
<td>II</td>
<td>No</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1193</td>
<td>Methyl ethyl ketone solution</td>
<td>3</td>
<td>II</td>
<td>No</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 14, 2019
Supersedes Date: May 1, 2015
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.