

SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Bond-1™ Primer/Adhesive

Product Use: Dental product: Total-etch bonding system

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: May 28, 2019

Section 2. Hazards Identification

GHS Classification:

Flammable Liquids Category 2
Skin Irritation Category 2
Eye Irritation Category 2A
Skin Sensitization Category 1
Specific Target Organ Toxicity Single Exposure Category 3

Label Elements:

Danger!



Hazard Phrases

Highly flammable liquid and vapor.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
Causes serious eye irritation.
May cause drowsiness and dizziness.

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.
 Avoid breathing vapor.
 Use only outdoors or in a well-ventilated area.
 Wash hands thoroughly after handling.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves, protective clothing, eye protection, face protection.
 IF ON SKIN: 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 or 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. If eye irritation persists: Get medical attention.
 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
Acetone	67-64-1	30-60%
Ethanol	64-17-5	10-30%
2-hydroxyethyl methacrylate	868-77-9	10-30%

Section 4. First Aid Measures

Inhalation: Remove victim to fresh air. Get medical attention if symptoms occur.

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. Skin contact causes skin irritation and may cause an allergic skin reaction. Inhalation can cause central nervous system depression and may cause drowsiness and dizziness. Ingestion can also cause central nervous system depression and may be irritating to mouth, throat and stomach.

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 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. 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: 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 between 2°C to 8°C (35.6°F to 46.4°F). 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
Acetone	250 ppm TWA NIOSH REL 590 mg/m ³ TWA NIOSH REL
Ethanol	1000 ppm TWA NIOSH REL
2-hydroxyethyl methacrylate	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:	Pale yellow liquid	Odor:	Acetone
Odor Threshold:	Not available	pH:	Not available
Melting/Freezing Point:	Not available	Boiling Point/Range:	>35°C
Flash Point:	-17.8°C (-0.04°F) (Acetone) (Closed cup)	Evaporation Rate:	Not available
Flammability: (Solid, Gas)	Highly flammable liquid and vapor	Flammability Limits:	LEL: 2.6 volume % UEL: 13 volume %
Vapor Pressure:	18.4 kPa	Vapor Density:	Not available
Relative Density:	<1	Solubilities:	Poorly soluble 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: Avoid heat, sparks, flames, and initiators. Loss of inhibitor or heat may cause polymerization.

Incompatible Materials: Oxidizing materials, reducing materials, acids, alkalis, ammonia, amines, and chlorinated compounds.

Hazardous decomposition products: None if stored normally.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: Can cause central nervous system depression. Product may cause drowsiness, dizziness, and respiratory irritation.

Skin Contact: Causes skin irritation and defat the skin. May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation.

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

Chronic Hazards: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Skin Sensitization: No adverse effects expected. This product is not expected to cause skin sensitization.

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): Single exposure to this product may cause narcotic effects and respiratory tract irritation.

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

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:

Product ATE: 16397.9 mg/kg (Oral)

Acetone: LD50 Oral rat: 5800 mg/kg; LD50 Dermal rabbit: 20000 mg/kg;

LC50 Inhalation rat: 76 mg/L/4hr

Ethanol: LC50 Inhalation rat: 124700 mg/m³/4hr; LD50 Oral rat: 7060 mg/kg;

LD50 Dermal rabbit: >20000 mg/m³

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

Section 12. Ecological Information

Toxicity:

Acetone: 96 hr LC50 Pimephales promelas 635 mg/L; 48 hr LC50 Daphnia magna 10 mg/L

Ethanol: 96 hr LC50 Pimephales promelas 13500 mg/L; 48 hr EC50 Daphnia magna 54000 mg/L;

72 hr IC50 Skeletonema costatum >10.9 mg/L

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

Persistence and degradability: This product is readily biodegradable.

Bioaccumulative Potential:

Acetone: log P_{ow} -0.27, potential for bioaccumulative is low.

Ethanol: log P_{ow} -0.35, potential of bioaccumulative is low

2-hydroxyethyl methacrylate has a BCF of 1.3 – 1.5, log P_{ow} 0.47, potential of bioaccumulative is low.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Section 13. Disposal Considerations

Disposal: For unused solution, flush thoroughly with large quantities of water into sewage disposal system in accordance with Federal, State, and local regulations. For used solution, the waste solution must be characterized by the generator and disposed of in accordance with Federal, State, and local regulations.

Container Disposal: Rinse empty container thoroughly with water and discard clean, empty container as general trash or offer for recycling, if available.

Section 14. Transport Information

	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	UN1090	Acetone solution RQ (Acetone)	3	II	None
Canada TDG	UN1090	Acetone solution RQ (Acetone)	3	II	None
IMDG	UN1090	Acetone solution	3	II	None
IATA/ICAO	UN1090	Acetone solution	3	II	None

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.

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.

Canadian Regulations:

Canadian Environmental Protection Act: All of the components in this product are listed on the Domestic Substances List (DSL) or exempt.

National Pollutant Release Inventory (NPRI): This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements NPRI: None

International Inventories

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

New Zealand: All of the components in this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempt.

Section 16. Other Information

NFPA Rating: Fire: 4 Health: 2 Instability: 0

Effective Date: May 28, 2019

Supersedes Date: October 16, 2014

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.