SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Temp-Bond® Clear™
Product Use: Dental Temporary Cement

Manufacturer: Kerr Corporation
1717 W. Collins Ave.
Orange, CA 92867-5422
U.S.A.

Australian Supplier: **Kerr Australia Pty Limited**
Unit 10, 112-118 Talavera Road
North Ryde, NSW 2113
Australia
Telephone no.: 1 800 643 603
Email general queries: kavokerr.orders@kavokerr.com
Email technical queries: safety@kavokerr.com

Information Phone Number: 1-800-KERR-123 (in the US)

Emergency Phone Number: Poisons Information Helpline: 131126 (24 hours)

SDS Date of Preparation/Revision: January 29, 2019

Section 2. Hazards Identification

GHS Classification for Base:
Eye Irritant Category 2A
Skin Irritant Category 2
Skin Sensitizer Category 1
Toxic to Reproduction Category 1B

Label Elements:

Danger!

Hazard Phrases
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child by ingestion.

Precautionary Phrases

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves and eye protection.
P308+P313 IF exposed or concerned: Get medical attention.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical attention.
P362 Take off contaminated clothing and wash before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical attention.
P405 Store locked up.
P501 Dispose of contents and container in accordance with local and national regulations.

GHS Classification for Catalyst:
Carcinogen Category 1B
Eye Damage Category 1
Skin Corrosion Category 1B
Skin Sensitizer Category 1
Germ Cell Mutagen Category 2
Specific Target Organ Toxicity Repeated Exposure Category 2

Label Elements:

Danger!

Hazard Phrases
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H373 May cause damage to lungs through prolonged or repeated exposure by inhalation.

Precautionary Phrases
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dusts.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves, protective clothing, eye protection, and face protection.
P308+P313 IF exposed or concerned: Get medical attention.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P310 Immediately call a POISON CENTER or doctor.
P363 Wash contaminated clothing before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310 Immediately call a POISON CENTER or doctor.
P405 Store locked up.
P501 Dispose of contents and container in accordance with local and national regulations.

GHS Classification as extruded through syringe:
Carcinogen Category 1B
Eye Irritant Category 2A
Skin Irritant Category 2
Skin Sensitizer Category 1
Germ Cell Mutagen Category 2
Toxic to Reproduction Category 1B
Specific Target Organ Toxicity Repeated Exposure Category 2

Label Elements:

Danger!

Hazard Phrases
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H360 May damage fertility or the unborn child by ingestion.
H373 May cause damage to lungs through prolonged or repeated exposure by inhalation.

Precautionary Phrases
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves and eye protection.
P308+P313 IF exposed or concerned: Get medical attention.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical attention.
P362 Take off contaminated clothing and wash before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical attention.
P405 Store locked up.
P501 Dispose of contents and container in accordance with local and national regulations.

Section 3. Composition/Information on Ingredients

The following ingredients are in the Base:

Component	CAS No.	Amount
Fumed silica	Mixture	15-25%
Tripropylene glycol diacrylate	42978-66-5	<10%
Hydroxyethylmethacrylate	868-77-9	<10%
Neopentylgycol propoxylate diacrylate	84170-74-1	<2%
N-(2-Pyridyl)thiourea	14294-11-2	<2%
Ethyldimethylaminobenzoate	10287-53-3	<2%

The following ingredients are in the Catalyst:

Component	CAS No.	Amount
Fumed silica	Mixture	15-25%
Tripropylene glycol diacrylate	42978-66-5	<10%
Cumyl Hydroperoxide	80-15-9	<10%
Cumene	98-82-8	<0.5%

The following ingredients are in the final extruded product:

Component	CAS No.	Amount
Fumed silica	Mixture	15-25%
Tripropylene glycol diacrylate	42978-66-5	<10%
Hydroxyethylmethacrylate	868-77-9	<10%
Cumyl Hydroperoxide	80-15-9	<3%
Ethyldimethylaminobenzoate	10287-53-3	<1%
Cumene	98-82-8	<0.5%

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: May cause moderate eye and skin irritation. May cause skin sensitization. Inhalation of dust from dried product or vapors may cause irritation of the mucous membranes and upper respiratory tract. This product contains ingredients that

may cause reproductive harm and irreversible genetic defects. Prolonged or repeated exposure by inhalation may damage the lungs. This product contains a small amount of Cumene which may cause cancer. Risk of cancer depends on duration and level of exposure.

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 oxides of carbon and nitrogen; 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. 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. Avoid breathing dust from dried product 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: Avoid 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. Avoid breathing 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 container tightly closed and sealed until ready to 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
Fumed silica (as amorphous silica)	2 mg/m3 TWA AU OEL
Tripropylene glycol diacrylate	None Established
Hydroxyethylmethacrylate	None Established
Neopentylgycol propoxylate diacrylate	None Established
N-(2-Pyridyl)thiourea	None Established
Ethyldimethylaminobenzoate	None Established
Cumyl Hydroperoxide	None Established
Cumene	25 ppm TWA, 75 ppm STEL AU OEL

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:	Clear Paste	**Odor:**	Fruity ester-like odor
Odor Threshold:	Not available	**pH:**	Not available
Melting/Freezing Point:	Not available	**Boiling Point/Range:**	Not available
Flash Point:	Not available	**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:	Not available	**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: Keep away from flames, heat, and direct sunlight.
Incompatible Materials: Oxidizing materials.
Hazardous decomposition products: Thermal decomposition will produce oxides of carbon and nitrogen; and metal oxides.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: Inhalation of dust from dried product or vapors may cause nose, throat and upper respiratory tract.
Skin Contact: Direct contact may cause moderate skin irritation. May cause an allergic skin reaction.
Eye Contact: Direct contact may cause moderate eye irritation.
Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Hazards: Prolonged or repeated exposure to Cumyl Hydroperoxide may damage lungs.

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

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

Skin Sensitization: This product is expected to cause skin sensitization.

Respiratory Sensitization: No data available. This product is not expected to cause respiratory sensitization.

Germ Cell Mutagenicity: Cumyl Hydroperoxide has been classified as mutagenic by the Australian Hazardous Chemical Information system. Cumyl Hydroperoxide tested positive in in-vitro Bacterial Reverse Mutation Assay and in-vitro bacterial gene mutation assay.

Carcinogen: Cumene is listed as Possibly Carcinogen to Humans (Group 2B) by IARC, Reasonably Anticipated to be a Human Carcinogen by NTP, and as a carcinogen Category 1B by the Australian Hazardous Chemical Information System (HCIS). None of the other components are listed as a carcinogen or potential carcinogen by IARC, NTP or the EU CLP.

Developmental / Reproductive Toxicity: This product is classified as a reproductive hazard based on the Ethyldimethylaminobenzoate.

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

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

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:
Extruded Product ATE: >5000 mg/kg (oral), >5 mg/L (inhalation, as mist), >2000 mg/L (dermal)

Fumed silica: Oral rat LD50: >5000 mg/kg, Inhalation rat LC0: >0.139 mg/L/4hr (no mortality), Skin rat LD50: >5000 mg/kg
Tripropylene glycol diacrylate: Oral rat LD50: >5000 mg/kg, Skin rabbit LD50: 3650 mg/kg
Hydroxyethylmethacrylate: Oral rat LD50: 5564 mg/kg, Skin rabbit LD50: >5000 mg/kg
Neopentylgycol propoxylate diacrylate: Oral rat LD50: >5000 mg/kg, Inhalation rat LC50: >2 mg/L/4hr, Skin rabbit LD50: >2000 mg/kg
N-(2-Pyridyl)thiourea: Oral LD50: 100 mg/kg (point estimate)
Ethyldimethylaminobenzoate: Oral rat LD50: >2000 mg/kg, Skin rat LD50: >2000 mg/kg
Cumyl Hydroperoxide: Oral rat LD50: 382 mg/kg, Inhalation rat LC50: 1.37 mg/L/4hr, Skin rabbit LD50: 1200-1520 mg/kg
Cumene: Oral rat LD50: 2260 mg/kg, Skin rabbit LD50: >3160 mg/kg

Section 12. Ecological Information

Toxicity: Tripropylene glycol diacrylate: 96 hr LC50 Ide Fish: >4.6-10 mg/L, 48 hr EC50 Daphnia magna: 89 mg/L
Neopentylgycol propoxylate diacrylate: 96hr LC50 Danio Rerio: 2.7 mg/L, 48 hr EC50 Daphnia magna: 37 mg/L, 72hr EC50 Freshwater algae: 11 mg/L
Ethyldimethylaminobenzoate: 96hr LC50 Rainbow trout: 1.9 mg/L, 48 hr EC50 Daphnia magna: 4.5 mg/L
Cumyl Hydroperoxide: 96hr LC50 Rainbow trout: 3.9 mg/L, 48 hr EC50 Daphnia magna: 18.84 mg/L
Cumene: 96hr LC50 Rainbow trout: 4.8 mg/L, 28 day NOEC Zebra fish or Fathead minnow: 0.38 mg/L (QSAR), 48hr EC50 Daphnia magna: 2.14 mg/L, 21 day NOEC Daphnia magna: 0.35 mg/L

This product is expected to be harmful to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

Persistence and degradability: Ethyldimethylaminobenzoate: Not readily biodegradable-40% in 28 days. Cumyl Hydroperoxide: Not readily biodegradable- 2-7% in 28 days.

Bioaccumulative Potential: No data available.

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
ADG	None	Not Regulated	None	None	Not applicable
IMDG	None	Not Regulated	None	None	Not applicable
IATA/ICAO	None	Not Regulated	None	None	Not applicable

Special Precautions for User: None identified

Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: Not applicable – product is transported only in packaged form.

Hazchem Code: Not applicable

Section 15. Regulatory Information

Montreal Protocol (Ozone Depleting Substances): None present
The Stockholm Convention (Persistent Organic Pollutants): None present
The Rotterdam Convention (Prior Informed Consent): None present
Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): None present

Australian AICS: Not determined.

Section 16. Other Information

Effective Date: January 29, 2019
Supersedes Date: February 3, 2016
Revision Summary: All Sections – New SDS format

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