

SAFETY DATA SHEET

Section 1. Product And Company Identification

Product Name: Pulp Canal Sealer™ Powder

Product Use: Dental product: Endodontic obturation systems and fill products

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: May 9, 2019

Section 2. Hazards Identification

GHS Classification:

Eye Irritation Category 2 Aquatic Acute Category 1 Aquatic Chronic Category 1

Label Elements:





Hazard Phrases

Causes serious eye irritation. Very toxic to aquatic life with long lasting effects.

Precautionary Phrases:

Wash hands thoroughly after handling. Avoid release to the environment.

Wear eye protection.

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention.

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.

Collect spillage.

Dispose of contents and container in accordance with local and national regulations.



Section 3. Composition/Information on Ingredients

Component	CAS No.	Amount
Zinc oxide	1314-13-2	30-60%
Silver	7440-22-4	10-30%
5,5'-diisopropyl-2,2'-dimethylbiphenyl-4,4'- diyl dihypoiodite	552-22-7	0.1-5%

Section 4. First Aid Measures

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

Skin Contact: Immediately flush skin with plenty of 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 eye irritation. Ingestion may be irritating to mouth, throat and stomach. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Indication of immediate medical attention and special treatment, if needed: Immediate medical attention is not required. Treat symptomatically.

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, 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. 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. For containment: collect all waste in suitable and labelled containers and dispose according to local legislation. Sweep or shovel spills into suitable containers. Minimize generation of dust. Store away from other materials.

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
Zinc oxide	15 mg/m ³ CEIL NIOSH REL (dust)
	5 mg/m ³ TWA NIOSH REL (dust and
	fumes)
	10 mg/m ³ STEL NIOSH REL (fume)
Silver	0.1 mg/m ³ TWA ACGIH TLV
5,5'-diisopropyl-2,2'-dimethylbiphenyl-4,4'-diyl dihypoiodite	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: Odor Threshold:	Beige powder Not available	Odor: pH:	Odorless 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	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: Avoid excessive heat and direct sunlight.

Incompatible Materials: Oxidizing materials.

Hazardous decomposition products: None if stored normally.

Section 11. Toxicological Information

Potential Health Effects:

Inhalation: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin Contact: None known.

Eye Contact: Causes eye irritation.

Ingestion: Swallowing may be irritating to mouth, throat and stomach.

Chronic Hazards: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Skin corrosion/irritation: This product is not expected to cause skin irritation or corrosion.

Eye damage/ irritation: This product is not expected to cause eye irritation or corrosion.

Skin Sensitization: No adverse effects expected. This product is classified as Grade I – weak sentitizer in Kligman test.

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): No data available.

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

Aspiration Toxicity: Not an aspiration hazard.

Acute Toxicity Values:

Product ATE: 11298.3 mg/kg (Oral) Zinc oxide: LD50 Oral rat: >15000 mg/kg; LD50 Dermal rat: >2000 mg/kg; LC50 Inhalation rat: 5.7 mg/L/4 hr Silver: LD50 Oral rat: >5000 mg/kg; LD50 Skin rat: >2000 mg/kg 5,5'-diisopropyl-2,2'-dimethylbiphenyl-4,4'-diyl dihypoiodite: LD50 Oral rat: 980 mg/kg

Section 12. Ecological Information

Toxicity:

Zinc oxide: 96 hr LC50 Oncorhynchus mykiss 1.1 ppm; 72 hr EC50 Pseudokirchneriella subcapitata 0.042 mg/L; 48 hr LC50 Daphnia magna 98 µg/L Silver: 96 hr LC50 Fathead minnow-1.2 µg/L; 48 hr LC50 Daphnia magna- 0.22 µg/L (M-Factor Acute: 1, M-Factor Chronic: 10)

This product is classified as very toxic to aquatic life with long lasting effects. Releases to the environment should be avoided.

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

Bioaccumulative Potential: Zinc oxide has a BCF of 60960, potential for bioaccumulative is high.

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	UN3077	Environmentally hazardous substances, solid, n.o.s. (Zinc	9	111	Yes
		oxide, Silver). Marine			



		pollutant (Zinc oxide, Silver) RQ (Silver)			
EU ADR/RID	UN3077	Environmentally hazardous substances, solid, n.o.s.	9		Yes
IMDG	UN3077	Environmentally hazardous substances, solid, n.o.s. (Zinc oxide, Silver). Marine pollutant (Zinc oxide, Silver)	9	111	Yes
IATA/ICAO	UN3077	Environmentally hazardous substances, solid, n.o.s. (Zinc oxide, Silver)	9		Yes

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):

Zinc oxide	1314-13-2	30-60%
Silver	7440-22-4	10-30%

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: 0 Health: 1

Instability: 0

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