

1. Product and Company Identification	
Product Name ZOE B & T[®] POWDER Zinc Oxide Eugenol Base and Temporary Filling Material	MSDS Chemical Number 510898
Trade Name & Synonyms ZOE B & T[®] POWDER Zinc Oxide Eugenol Base and Temporary Filling Material	Date of Last Revision 01/15/07
Chemical Name N. A.	Manufacturer DENTSPLY/Caulk
C.A.S. Number N. A.	Address 34 West Clarke Avenue Milford DE 19963-1805 http://www.caulk.com
Grades or Minor Variant Identifiers N. A.	Information Telephone Number (302) 422-4511 (8:00 AM - 4:30 PM Eastern Time)
Product Use (for Canada) N. A.	Emergency Telephone Number (302) 422-4511 (8:00 AM - 4:30 PM Eastern Time)

2. Composition Of Ingredients			
Hazardous Components	C.A.S. Number	Exposure Limits	%
Zinc oxide	1314-13-2	10 mg/M ³	> than 75
Other Information: Yellow colorant is synthetic inorganic iron oxide.			

3. Hazard Identification					
Emergency Overview Material may be irritating to eyes. No significant hazards for emergency responses are known.					
Routes of Exposure	Signs and Symptoms	Single, Repeated or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effects	Target Organ(s)
Eye	Material may cause slight transient (temporary) irritation.	Single & Repeated	Mild	Irritation and possible ocular damage due to the powder used in the product.	Not Applicable
Skin	Irritation may be an irritant after repeated and prolonged exposure.	Repeated	Mild	Irritation or possible allergic response.	Not Applicable
Inhalation	Material is probably not harmful if swallowed.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Medical Conditions Aggravated by Exposure: Open sores and wounds of the skin.					
Carcinogenicity: NTP: Not listed. IARC monographs? Not listed. OSHA regulated? No. All components of this product are in compliance with the inventory listing requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.					
Potential Environmental Effects: Do not allow to enter sewers/ surface or ground water.					
NFPA Hazard Classification Ratings (Scale 0-4): Health = 1, Fire = 0, Reactivity = 1					

4. First Aid Measures			
Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Raise opened eye for several minutes under running water. Then consult physician.	Not Applicable	Not Applicable
Skin	Immediately wash with soap and water and rinse thoroughly.	Not Applicable	Not Applicable
Inhalation	Simply breathe air, consult physician if constant persist.	Not Applicable	Not Applicable
Ingestion	Rinse mouth out and then drink plenty of water. If symptoms persist consult physician.	Not Applicable	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable
Note to Physicians: (Treating, Testing and Monitoring): Treat symptomatically.			

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5. Fire and Explosion Data			
Flashpoint Method: Not Applicable	Flammable (Explosive) Limits in Air LEL: Not Applicable UEL: Not Applicable	Autoignition Temperature: Not Applicable	Other: Not Applicable
Flame Propagation or Burning Rate (for Solids): Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: Not Applicable	
Extinguishing Media: CO ₂ , powder, or water spray.			
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective device.			
Unusual Fire and Explosion Hazard: During a fire, formation of toxic and/or irritating compounds may be present.			

6. Accidental Release Measures	
Containment Techniques: Material is a solid and as such containment is limited to steps to reduce dust.	
Spill/Leak Clean-up Procedures and Equipment: Wear protective clothing and remove bulk material and place in a labeled plastic or metal container.	
Vacuuming Procedures: Not Applicable	
Special Instructions: Prevent formation of dust.	
Waste Disposal Requirements: Not Applicable	

7. Handling and Storage	
Handling Practices and Warnings: Product is intended for dental use only. Handling of this product should be by trained dental healthcare professionals only. Observe normal care for working with chemicals.	
Storage Practices and Warnings: Store only in the original package. Keep package tightly sealed. Store in a dry area. Store away from food and beverages.	

8. Exposure Control / Personal Protection		
Routes of Entry: None reported during normal intended use of this product	Personal Protective Equipment (PPE) for Normal Use	Other Engineering Controls: Not Applicable
Eye/Face: None Required	Respiratory Protection: Not Applicable	PPH for Emergency: Not Applicable
Skin: None Required	Hand Protection: None Required	Not Applicable
Inhalation: None Required	Body Protection: Protective work clothing	Not Applicable
General Hygiene Considerations and Work Practices: Keep away from foodstuffs, beverages and food. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at end of work. Avoid contact with the eyes and skin.		
Protective Measures During Repair and Maintenance of Contaminated Equipment: Not Applicable		
Other Protective Measures and Equipment: Not Applicable		

9. Physical and Chemical Characteristics		
Appearance: Off-white powder		Odor: Mild odor
Normal Physical State: Dry powder		Melting Point: Not Applicable
Specific Gravity: 1.22 g/cm ³	Solubility in Water: Partially soluble	pH: Not Applicable
Vapor Pressure (mm Hg): Not Applicable	Vapor Density (AIR=1): Not Applicable	Evaporation Rate (Butyl Acetate = 1): Not Applicable
Other: Not Applicable		

10. Stability and Reactivity Data	
Incompatibility (Materials to Avoid): Strong acids, strong oxidizing agents	Conditions to Avoid: None known
Hazardous Products Produced During Decomposition: Toxic zinc	Conditions to Avoid: None known
Hazardous Polymerization: 1. May Occur 2. May Not Occur	Conditions to Avoid: None known
Stability: 1. Stable 2. Unstable	Conditions to Avoid: None known

11. Toxicological Information
Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: N.A.

12. Ecological Information
Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Water Hazard Class 2 (Self-assessment) Very toxic to fish. Do not allow product to reach ground water, water streams or sewage system. Also poisonous for fish and plankton in water bodies. R50/51 Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.

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13. Disposal Considerations

Regulations: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 Dispose of material as solid waste in a closed container. Dispose of in accordance with Federal, State and Local regulations.
 Properties (Physical/chemical) Affecting Disposal: Dispose of material in sealed work in a closed container.

14. Transport Information

Regulated for Shipping: No. Not Regulated	DOT Shipping Name: Not Regulated	Packing Group: Not Applicable
Do Changes in Quantities, packaging, or shipment method change product classification? No	DOT Hazard Class: Not Applicable	UN Number: Not Applicable

15. Regulatory Information

D.I. Federal Regulations: 40 CFR 156.100-156.105 (Hazardous Waste Reporting Requirements). Many states have their own hazardous waste reporting requirements. Report spills/releases under federal state and local regulations.
 Federal Hazardous Chemicals: This product contains the following chemicals subject to Acute Release Reporting Requirements Under SARA Title III, Section 302 (40 CFR 171.101-171.109).
 Section 302 Hazardous Chemicals: Ethyl Acrylate
 U.S. State Regulations: California Proposition 65. All of the components of this product are listed on the TSCA inventory.
 U.S. State Regulations: California Proposition 65. The components of this product contain any chemicals, which are on the California Proposition 65 list.
 Canada: 301/132 - Irritant, 302/132 - Harmful, 303/132 - Aquatic Toxicity, 308/132 - Irritant.
 International Regulations: European Union (EU) REACH. This product is a medical device and not subject to chemical notification requirements.
 European Community Labeling: Not a dangerous preparation.
 European Community Labeling: R50/53 Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. S57 Use appropriate containers to avoid environmental contamination. S60 This material and its container must be disposed of as hazardous waste.
 European Inventory of Existing Chemical Substances (EINECS): This product is a medical device and not subject to chemical notification requirements.
 Other: U.S.A.

16. Other Information

To the best of our knowledge this product does not contain glass, wheat grains, wheat straw, natural rubber, or natural latex.
 All components are synthetically produced, none are derived from animal products.