

**DENTSPLY/International
DENTSPLY/Caulk
Safety Data Sheet**

551899

1. Product and Company Identification

Product Name Orthodontic Resin Powder	SDS Code Number 551899
Trade Name & Synonyms Orthodontic Resin Powder	Date of Last Revision 02/21/14
Manufacturer DENTSPLY/Caulk	Address 38 West Clarke Avenue Milford DE 19963-1805 http://www.caulk.com, http://www.dentsply.com
Grades or Minor Variant Identities Not Applicable	Information Telephone Number (302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)
Product Use (for Canada) Not Applicable	Emergency Telephone Number (302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)

2. Hazard(s) Identification



Warning

Causes eye irritation

Causes mild skin irritation

Wash hands thoroughly after handling.

If In Eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical attention.

3. Composition/Information on Ingredients

Hazardous Components	C.A.S. Number	Exposure Limits	%
Benzoyl Peroxide	94-36-0	5.0 mg/M ³	< than 1

4. First Aid Measures

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If symptoms persist consult physician	Get medical aid.	Not Applicable
Skin	Flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Wash clothing before reuse.	Get medical aid if symptoms persist.	Not Applicable
Inhalation	Move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Consult physician if symptoms persist	Get medical aid.	Not Applicable
Ingestion	If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.	Get medical aid.	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable
Note to Physicians (Treating, Testing and Monitoring): Treat symptomatically.			

5. Fire and Explosion Data

Flashpoint Method: 304°C (572°F) Tag Closed Cup	Flammable (Explosive) Limits in Air LEL: 20mg/M ³ (as dust cloud) UEL: Not Applicable	Autoignition Temperature: >300°C (570°F)	Other: Not Applicable
Flame Propagation or Burning Rate (for Solids) Not Applicable	Properties Contributing to Fire Intensity: Not Applicable	Flammability Classification: NFPA Flammability =1	
Extinguishing Media: Water spray, water foam, CO ₂ , or extinguishing powder. Fight larger fires with water spray or alcohol resistant foam.		Extinguishing Media to Avoid: Water with full jet.	
Protection and Procedures for Firefighters: Firefighters should wear self-contained respiratory protective devices. Formation of toxic, irritating gases is possible from the decomposition of the polymer.			
Unusual Fire and Explosion Hazards: Dusts may be combustible when exposed to heat, flame, or oxidizing agents. Although the polymer dust is not easily ignited, the explosive limits of the polymer dust suspended in air are approximately those of coal dust therefore, fire fighters should avoid extinguishing methods which generate dust clouds. Formation of toxic, irritating gases is possible from the decomposition of the polymer. In routine use this product does not present an explosion hazard.			

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 scoop up bulk material and place in a labeled plastic or metal container. Avoid gross skin contact to minimize the possibility of contact dermatitis to susceptible persons. Polymer particles are slippery when spilled on hard floor so sweep immediately and wash area with water to avoid accidental falls. Keep exposure to airborne particles to a minimum when cleaning by using proper ventilation as discussed in section 8.		
Evacuation Procedures: Not Applicable	Special Instructions: Not Applicable	Reporting Requirements: Not Applicable

7. Handling and Storage

Handling Practices and Warnings: Minimize dust generation when handling. Avoid inhalation of dust, and contact with eyes. 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 in a cool, dry, well ventilated area. Store only in the original package. Keep package tightly sealed. To prevent water absorption and contamination. Store away from food and beverages.

8. Exposure Control / Personal Protection



Ventilation: Use adequate general or local exhaust to keep airborne concentrations below the permissible exposure limits shown in section 2.		Other Engineering Controls: Not Applicable
Routes of Entry	Personal Protective Equipment (PPE) for Normal Use	PPE for Emergencies
Eye/Face	Wear appropriate protective eyeglasses or safety glasses to prevent exposure during normal use.	For emergency or higher risk of exposure, wear chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin	During normal use, disposable gloves are recommended to prevent skin exposure.	For emergency or higher risk of exposure, wear protective gloves to prevent skin exposure and wear a lab coat to prevent contamination of your clothing. Wash contaminated clothing before reuse.
Inhalation	During normal use with local exhaust, use of a dust mask will provide additional protection.	For emergency or higher risk of exposure, (for example when obvious dust cloud is observed), follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN149. Always use a NIOSH or European Standard EN149 approved respirator when necessary.
Body Protection	Protective work clothing	Not Applicable
General Hygiene Considerations and Work Practices: When using polymer particulate material, use methods to minimize dust generation. Keep away from foodstuffs, beverages and feed. 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: Wear protective gloves and OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Always use a NIOSH or European Standard EN149 approved respirator to prevent inhalation of dust.		
Other Protective Measures and Equipment: Facilities should be equipped with an eyewash station.		

9. Physical and Chemical Characteristics

Appearance: White free flowing powder.		Odor: Characteristic methacrylate ester odor.
Normal Physical State: Dry powder (Polymer particles)		Melting Point: Not Applicable
Specific Gravity: 1.0 g/cm ³	Solubility in Water: Not soluble	pH: Not Applicable
Vapor Pressure (mm Hg): Not Applicable	Vapor Density (AIR=1) Not Applicable	Evaporation Rate (Butyl Acetate =1) Not Applicable
Other: Decomposition Temperature 200°C (392°F)		

10. Stability and Reactivity Data

Incompatibility (Materials to Avoid): Strong Oxidizing agents, strong bases, amines and alkalis.	
Hazardous Products Produced During Decomposition: Carbon monoxide, irritating gases and toxic fumes and gases, carbon dioxide.	
Hazardous Polymerization: ☐ May Occur ☒ May Not Occur	Conditions to Avoid: None known
Stability? ☒ Stable ☐ Unstable	Conditions to Avoid: Excess heat above 200°C (392°F), strong oxidants.

11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: Product may be an irritant to the skin in susceptible persons. On the eye the product has an irritating effect. Certain susceptible persons may be sensitized or allergic to acrylates and methacrylates.					
Emergency Overview: Free flowing powder is not known to cause significant health problems. Should be considered an inert or nuisance dust. Avoid inhalation of dust. Keep dust out of eyes to prevent possible irritation.					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	Material can cause irritation and redness.	Single	Mild	Irritation and possible corneal damage.	Not Applicable
Skin	Material may cause irritation.	Single & Repeated. Irritation may become more pronounced after repeated	Mild	Irritation or possible allergic response. Some individuals may become sensitized to powder after repeated doses and	Not Applicable

		exposure in some individuals.		develop contact dermatitis.	
Inhalation	Material may cause irritation.	Single & Repeated. Irritation may become more pronounced after repeated exposure in some individuals.	Not known to cause any health issues so anticipated response is mild.	Some individuals may become sensitized to powder after repeated doses and develop contact dermatitis.	Not Applicable
Ingestion	Not a normal route of entry. May cause irritation of digestive tract.	Not a normal route of entry.	Not known to cause any health issues so anticipated response is mild.	Not a normal route of entry.	Not Applicable
Other	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Medical Conditions Aggravated by Exposure: Existing respiratory conditions may be aggravated by inhalation of powders. Individuals with known sensitivity to methacrylates, or acrylates used in Dental products.					
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: Not considered hazardous to surface or ground water.					
NFPA Hazard Classification Ratings (Scale 0-4), Health = 1, Fire = 1, Reactivity = 0					

12. Ecological Information

Toxicity Data, Environmental Fate, Physical/Chemical Data, or other Data Supporting Environmental Hazard Statements: Material is a solid with low volatility and is insoluble in water. Material is expected to have low toxicity to organisms in the environment. It is not biodegradable. Material is not likely to be removed during biological treatment process.
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13. Disposal Considerations

Regulations: May be disposed of in landfill or incinerated. 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: Dry powder. Dispose of material as solid waste 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

U.S. Federal Regulations: CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations
Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
U.S. State Regulations California Proposition 65: This product does not contain any chemicals, which are on the California Proposition 65 list.
International Regulations: Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.
European Community Labeling: Not a dangerous preparation.
European Inventory of New and Existing Chemicals Substances (EINECS): This product is a medical device and not subject to chemical notification requirements.
Other: Not Applicable

16. Other Information

To the best of our knowledge this product does not contain gluten, wheat grains, flaxseed, natural rubber, or natural latex. All components are synthetically produced; none are derived from animal products. This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific products features and shall not establish a legally valid contractual relationship. The attached safety data sheet covers the dangers and measures to be taken when large quantities of material are released, for example due to accidents during transport or storage by the dealer. For quantities of material typically used in clinical practice, information necessary for safe use and storage of the product is given in the DFU.
