

DENTSPLY International

DENTSPLY PROSTHETICS

Safety Data Sheet

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1. PRODUCT IDENTIFICATION

Trade Name (as labeled):	Dentsply® Repair Material Powder
Product Identifier (Part/Item Number):	680010, 680016, 680011, 680028, 680019, 680022, 680020, 610030, 680005, 680015, 680006, 680027, 680040, 680041, 680041, 680043, 680050
U.N. Number:	Not Regulated
U.N. Dangerous Goods Classification:	Not Regulated
Recommended Use:	Resin used in removable dental appliances
Restrictions on Use:	For Professional Use Only
Manufacturer/Supplier Name:	Dentsply Prosthetics
Manufacturer/Supplier Address:	570 West College Ave. York, PA 17405-0872
Manufacturer/Supplier Telephone Number:	717-845-7511 (Product Information)
Emergency Contact Telephone Number:	800-424-9300 Chemtrec
Email address:	Prosthetics_MSDS@Dentsply.com

2. HAZARD(s) IDENTIFICATION

EU Classification (1999/45/EC): Irritant (Xi) R36/38, R43

Refer to Section 16 for the full text of the EU Classifications and R Phrases.

Labeling in accordance with 1999/45/EC



Irritant

R36/38 Irritating to eyes and skin
R43 May cause sensitization by skin contact.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical attention
S24/25 Avoid contact with skin and eyes.
S36/37 Wear suitable protective clothing and gloves.

US Hazard Classification: Hazardous

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components	C.A.S. #	EINECS #	Substance Classification	WT %
Methacrylate Polymers	Mixture	Mixture	Xi R36/38, R43	60-90
Titanium Dioxide	13463-67-7	236-675-5	Not applicable	0.1-1
Quartz	14808-60-7	238-878-4	Xn R48/20	0.4

Refer to Section 16 for the full text of the GHS and H phrases and EU Classifications and R Phrases.





4. FIRST-AID MEASURES

Routes of Exposure	First Aid Instructions
Eye	Immediately flush victim's eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation develops. Launder clothing before re-use. (Discard contaminated shoes).
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	If conscious, wash mouth out with water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.
Most important symptoms of exposure	May cause eye and skin irritation. May cause skin rash.
Note to Physicians (Treatment, Testing, and Monitoring) Treat symptomatically.	

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Water fog, foam, carbon dioxide dry chemical. Do not use a water stream.
Fire Fighting Procedures:	Use water to cool fire-exposed containers.
Specific Hazards Arising from the Chemical:	High concentrations of dust in air may be explosive.
Precautions for Fire Fighters:	Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus.

Recommended Protective Equipment for Fire Fighters:

EYES/FACE	HANDS	RESPIRATORY	THERMAL
			



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, PPE and Emergency Procedures: Avoid contact with eyes and skin. Do not breathe dust. Wear protective clothing and equipment as described in Section 8. Eliminate sources of heat, or ignition sources.

Environmental Precautions: Do not allow spills to be released into the environment. Do not allow material to enter lakes, streams, ponds, groundwater or soil. Report releases as required by local, state, and national authorities.

Methods and Materials for Containment and Clean-up: Carefully collect and place into a container for disposal. Do not generate airborne dust.

Recommended Personal Protective Equipment for Containment and Clean-up:

EYES/FACE	HANDS	RESPIRATORY	SKIN
			

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes and skin. Do not breathe dust. Wash thoroughly after handling. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Use good housekeeping to minimize accumulation of dust on equipment and surfaces. Keep away from sources of heat or ignition sources.

Empty containers retain product residues that can be hazardous. Follow all MSDS precautions when handling empty containers.



Conditions for Safe Storage: Store in a cool, dry, well ventilated area. Keep container tightly closed when not in use. Store away from oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Methacrylate Polymers: 15 mg/m³ TWA OSHA PEL (Total Dust)
 5 mg/m³ TWA OSHA PEL (Respirable)
 10 mg/m³ TWA WEL (Inhalable)
 4 mg/m³ TWA WEL (Respirable)
 4 mg/m³ TWA MAK (Inhalable)
 1.5 mg/m³ TWA MAK (Respirable)

Quartz: 10 mg/m³ TWA PEL (respirable fraction)
 % Silica + 2
 0.025 mg/m³ TWA TLV (respirable fraction)
 0.1 mg/m³ TWA UK WEL

Titanium Dioxide: 15 mg/m ³ TWA OSHA PEL (total dust) 10 mg/m ³ TWA ACGIH TLV 1.5 mg/m ³ (respirable dust) DFG MAK 10 mg/m ³ (inhalable) 4 mg/m ³ (respirable dust) TWA UK WEL			
Biological Exposure Limits: None established			
Appropriate Engineering Controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.			
Individual Protection Measures (PPE) Specific Eye/face Protection: Chemical safety glasses with sideshields or chemical goggles. Specific Skin Protection: Wear impervious gloves such as rubber to prevent skin contact. Specific Respiratory Protection: None required under normal use. If the exposure limits are exceeded an approved particulate respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with good industrial hygiene practice. Specific Thermal Hazards: None known			
Recommended Personal Protective Equipment			
EYES/FACE	HANDS	RESPIRATORY	SKIN
			
Environmental Exposure Controls: None required for normal use.			
General Hygiene Considerations and Work Practices: Wash thoroughly after handling.			
Protective Measures During Repair and Maintenance of Contaminated Equipment: Wear appropriate protective clothing and equipment.			

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pink free flowing powder	Explosive limits:	LEL: Not applicable UEL: Not applicable
Odor:	Faint odor	Vapor pressure:	Not applicable
Odor threshold:	Not available	Vapor density:	Not applicable
pH:	Not applicable	Relative density:	Not available
Melting/freezing point:	Not available	Solubility:	Not Soluble
Initial boiling point and range:	Not applicable	Partition coefficient: n-octanol/water:	Not applicable

Flash point:	579°F (304°C) TCC	Auto-ignition temperature:	Not available
Evaporation rate:	Not applicable	Decomposition temperature:	Not available
Flammability:	Not flammable	Viscosity:	Not applicable
Explosive Properties:	High concentrations of dust in air may be explosive.	Oxidizing Properties:	None
% Volatile by Volume:	0		

10. STABILITY AND REACTIVITY

Reactivity:: Non-reactive
Chemical Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Heat greater than 572°F (300°C). Keep away heat, sparks or ignition sources.
Incompatible materials: Avoid oxidizing agents.
Hazardous Decomposition Products: Thermal decomposition may release carbon oxides, and methyl methacrylate.

11. TOXICOLOGICAL INFORMATION

<p><u>Potential Health Effects:</u></p> <p><u>Eyes:</u> Dust may cause irritation, redness and tearing.</p> <p><u>Skin:</u> Dust may cause irritation, redness, rash and swelling. May cause allergic skin reaction (sensitization).</p> <p><u>Ingestion:</u> May cause gastrointestinal irritation with nausea, vomiting and diarrhea.</p> <p><u>Inhalation:</u> Inhalation of dust may cause irritation of the nose, throat and upper respiratory tract.</p> <p><u>Chronic Health Effects:</u> Excessive inhalation of respirable crystalline silica dust may cause may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function.</p> <p><u>Carcinogenicity:</u> Crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC and "Known to be a Human Carcinogen" by NTP. Titanium dioxide is listed by IARC as a group 2B carcinogen (possible human carcinogen).</p> <p><u>Mutagenicity:</u> No data available.</p> <p><u>Medical Conditions Aggravated by Exposure:</u> Individuals with pre-existing skin conditions may be at increased risk from exposure.</p> <p><u>Acute Toxicity Data:</u> Methacrylate Polymers: No data available Quartz: No data available Titanium Dioxide: Oral rat LD50 9,000 mg/kg</p>

Reproductive Toxicity Data: No data available

Specific Target Organ Toxicity (STOT):

Single Exposure: No data available.

Repeated Exposure: Lungs: Excessive inhalation of respirable crystalline silica dust may cause lung cancer.

12. ECOLOGICAL INFORMATION

Toxicity:

No data is currently available.

Persistence and Degradability: No data is currently available.

Bio-accumulative Potential: No data is currently available.

Mobility in Soil: No data is currently available.

Other Adverse Effects: No data is currently available.

Results of PBT/vPvB Assessment: No data is currently available.

13. DISPOSAL CONSIDERATIONS

Regulations: Dispose in accordance with all national and local regulations.

Properties (Physical/Chemical) Affecting Disposal: Empty containers retain product residues that can be hazardous. Follow all MSDS precautions when handling empty containers.

Waste Treatment Recommendations: Dispose in accordance with all national and local regulations. Avoid generating airborne dust.

14. TRANSPORT INFORMATION

UN Identification Number: Not Regulated

UN Proper Shipping Name: Not Regulated

Transport hazard class(es): Not Regulated

Packing Group: Not Regulated

Special precautions for user: Not Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

US OSHA Hazard Classification: Irritant, Sensitizer, Carcinogen.

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): 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.

Toxic Substances Control Act (TSCA): This product is a medical device and not subject to chemical notification requirements.

Clean Water Act (CWA): This material is not regulated under the Clean Water Act

Clean Air Act (CAA): This material is not regulated under the Clean Air Act

Superfund Amendments and Reauthorization Act (SARA) Title III Information:

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Immediate Hazard:	Yes	Pressure Hazard:	No
Delayed Hazard:	Yes	Reactivity Hazard:	No
Fire Hazard:	No		

This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):

Components	C.A.S. #	WT %
None		

State Regulations

California: This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm:

Components	C.A.S. #	WT %
Crystalline silica, quartz	14808-60-7	0.4%

International Regulations

Canadian Environmental Protection Act: This product is a medical device and not subject to chemical notification requirements.

Canadian Workplace Hazardous Materials Information System (WHMIS): Medical devices are not subject to WHMIS.

European Inventory of Existing Chemicals (EINECS): This product is a medical device and not subject to chemical notification requirements.

EU REACH: All components requiring registration have been pre-registered.

Australian Inventory of Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

China Inventory of Existing Chemicals and Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

Korean Existing Chemicals List: This product is a medical device and not subject to chemical notification requirements.

Philippine Inventory of Chemicals and Chemical Substances: This product is a medical device and not subject to chemical notification requirements.

16. OTHER INFORMATION

HMIS Hazard Rating:

Health –2* Flammability – 1 Physical Hazard– 1

Full text of Classification abbreviations used in Section 2 and 3:

Xi Irritant

Xn Harmful

R36/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitization by skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Supersedes: September 14, 2007

Revision Summary: Change in format. Comprehensive review. Changes to all sections.

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.