

DENTSPLY DeTrey GmbH

1. Product and Company Identification	
Product Name Thermaseal Plus Paste A	MSDS Code Number N/A
Trade Name & Synonyms Thermaseal Plus Paste A	Date of Last Revision 1-13-09
Chemical Name Epoxy Resin	Manufacturer DENTSPLY DeTrey GmbH
C.A.S. Number N/A	Address De-Trey-Str. 1 D-78467, Konstanz, Germany
Grades or Minor Variant Identities N/A	Information Telephone Number +49-(0)7531-583-0
Product Use (for Canada) Root Canal Filling Material	Emergency Telephone Number +49-(0)7531-583-0

2. Composition of Ingredients			
Hazardous Components	C.A.S. Number	Exposure Limits	%
Bisphenol-A-(epichlorhydrin) epoxy resin	25068-38-6	N/A	25-50%
Bis-[4-(-2,3-epoxypropoxy)phenyl]-methane	9003-36-5	N/A	2.5-10%

3. Hazard Identification					
Emergency Overview: Irritant, dangerous to the environment.					
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	Irritant	Single	Mild	Acute irritation	Eye
Skin	Can irritate the skin and cause redness, itching and irritation	Single	Mild	Acute irritation May cause sensitization	N/A
Inhalation	Can irritate the lungs and mucous membranes	Single	Mild	Acute irritation	N/A
Ingestion	Can cause nausea, vomiting, diarrhea and difficulty in swallowing.	Single	Mild	Acute irritation	N/A
Other N/A	N/A	N/A	N/A	N/A	N/A
Medical Conditions Aggravated by Exposure N/A					
Carcinogenicity (IARC, NTP) N/A					
Potential Environmental Effects Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.					

4. First Aid Measures			
Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	Rinse opened eye for several minutes under running water.	If symptoms persist consult a doctor.	N/A
Skin	Immediately wash with water and soap and rinse thoroughly.	If symptoms persist consult a doctor	N/A
Inhalation	Supply fresh air and call a medical doctor. In case of unconsciousness place patient in stable position, on his side, for transportation to a medical facility.	If symptoms persist consult a doctor	N/A
Ingestion	If ingestion occurs, flush mouth with water and seek medical attention immediately.	If symptoms persist consult a doctor	N/A
Other	N/A	N/A	N/A
Note to Physicians (Treatment, Testing, and Monitoring) N/A			

5. Fire and Explosion Data			
Flashpoint Method: N/A	Flammable (Explosive) Limits in Air LEL: N/A UEL: N/A	Auto ignition Temperature N/A	Other N/A
Flame Propagation or Burning Rate (for solids) N/A	Properties Contributing to Fire Intensity N/A	Flammability Classification N/A	
Extinguishing Media CO2, powder or water spray. Fight large fires with alcohol resistant foam.		Extinguishing Media to Avoid N/A	
Protection and Procedures for Firefighters Wear self-contained respiratory protective device.			
Unusual Fire and Explosion Hazards Formation of toxic gases is possible during heating or in case of fire.			

6. Accidental Release Measures
Containment Techniques Disposal must be made according to federal regulations. Do not dispose with household garbage. Do not put in the sewer system.
Spill/Leak Clean-Up Procedures and Equipment Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.
Evacuation Procedures N/A
Special Instructions

N/A

Reporting Requirements:

Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.

7. Handling and Storage

Handling Practices and Warnings

Product is intended for dental use only. Ensure good ventilation/exhaustion in the workplace. Prevent formation of aerosols. Observe normal care for working with chemicals.

Storage Practices and Warnings

Store only in original receptacle. Store in cool, dry conditions in well sealed receptacles.

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8. Exposure Control/Personal Protection		
Ventilation Use in a well-ventilated area.	Other Engineering Controls None	
Routes of Entry:	Personal Protective Equipment (PPE) for Normal Use:	PPE for Emergencies:
Eye/Face	Tightly sealed goggles.	N/A
Skin	Wear protective gloves. Glove material must be impermeable and resistant to product.	N/A
Inhalation	Not necessary if room is well-ventilated.	N/A
General Hygiene Considerations and Work Practices Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at end of work. Wear protective gloves. Wear protective clothing.		
Protective Measures During Repair and Maintenance of Contaminated Equipment None		
Other Protective Measures and Equipment None		

9. Physical and Chemical Characteristics		
Appearance Pasty, yellow	Odor Weak, epoxy resin	
Normal Physical State: <input checked="" type="checkbox"/> Liquid Gas Solid (Other)	Boiling Point- undetermined Melting Point - undetermined Freezing Point - undetermined	
Specific Gravity or Density (H ₂ O=1) Not determined	Solubility in Water Not miscible or difficult to mix.	pH N/A
Vapor Pressure (mm Hg.) N/A	Vapor Density (AIR= 1) N/A	Evaporation Rate (Butyl Acetate = 1) N/A
Other N/A		

10. Stability and Reactivity Data		
Incompatibility (Materials to Avoid) No decomposition if used according to specifications.		
Hazardous Products Produced During Decomposition None		
Hazardous Polymerization? N/A May Occur	N/A <u>May Not Occur</u>	Conditions to Avoid N/A
Stability? N/A Stable	N/A <u>Unstable</u>	Conditions to Avoid N/A

11. Toxicological Information
Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data Acute Toxicity: N/A LD/LC50 values relevant for classification: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight=700)

Oral: LD 50, >5000 mg/kg (rat) Dermal: LD 50, >2000mg/kg (rat)
9003-36-5 Bis-[4- Oral LD 50> 5000 mg/kg (rat)

Primary irritant effect:

Skin: Irritant to skin and mucous membranes

Eyes: Irritating effect

Sensitization: Possible through skin contact

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12. Ecological Information
<p>Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements</p> <p>Toxic for fish. Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous to fish and plankton in water bodies. Toxic to aquatic organisms.</p>

13. Disposal Considerations
<p>Regulations</p> <p>Disposal must be made according to federal regulations. Do not dispose with household garbage. Do not put in the sewer system</p>
<p>Properties (Physical/Chemical) Affecting Disposal</p> <p>N/A</p>

14. Transport Information		
<p>Regulated for shipping?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Proper Shipping Name</p> <p>Environmentally Hazardous Substance, Liquid, N.O. (reaction product)</p>	<p>Packing Group</p> <p>III</p>
<p>Do changes in quantity, packaging, or shipment method change product classification?</p> <p>No</p>	<p>Hazard Class</p> <p>9</p>	<p>Identification Number</p> <p>3082</p>
<p>Other</p> <p>N/A</p>		

15. Regulatory Information
<p>Federal Regulations</p> <p>Water hazard class 2; hazardous for water.</p>
<p>International Regulations</p> <p>This product has been classified and marked in accordance with the Ordinance on Hazardous Materials. Contains epoxy constituents. See information supplied by manufacturer. Product is an irritant and hazardous to the environment.</p>
<p>Other</p> <p>N/A</p>

16. Other Information
<p>This information is based on our present knowledge; however, this shall not constitute a guarantee for specific product features. 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 Directions For Use.</p> <p>Contact: Hotline for urgent technical support: +49-7531-583-0</p>