## **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

075896972

N/A

H312

H332

#### **Safety Data Sheet**

Trade Name: <i>FORENDO™ PASTE</i> , Calcium Hydroxide with Iodoform				
1.0	Commercial Product Name and Supplier			
1.1	Commercial product name / designation	FORENDO™ PASTE		
1.2	Application / Use	Dental material for use by dental professionals.		
1.2.2	SIC	851 Human health activity		
1.2.3	Use Category	55		
1.3	Manufacturer  Pulpdent Corporation	Telephone: 1 617 926-6666 / Fax: 1 617 926-6262		
	80 Oakland Street, P.O. Box 780 Watertown, MA 02472 USA	Email: Pulpdent@pulpdent.com		
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour	/ USA)	
1.5	Authorized European Representative	Advena Limited Tower Business Centre, 2t Tower Street, Swatar, BKR 4013 Malta	nd Floor,	
	UK Responsible Person	Advena Limited Pure Offices, Plato Close Warwick, CV34 6WE Unite	ed Kingdom	
2.0	Hazards Identification			
2.1	Classification			
2.1.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Hazard Class	Hazard Category	Hazard Statement
		Skin irritation	2	H315
		Eye irritation	2	H319
		STOT SE Respiratory tract irritant	3	H335
		Acute toxicity (oral)	4	H302

Acute toxicity (dermal)

Harmful if inhaled

2.1.2 Classification according to Directive 67/548/EEC

Xi (Irritant); R41, R20/21/22, R36/37/38 (See SECTION 16 for full text of risk phrases)

#### 2.2 GHS Label Elements Hazard Pictogram



Signal Word: Warning

Restricted to use by dental professional only

**Hazard Statements:** 

H315: Causes skin irritation. Category 2

H319: Causes serious eye irritation. Category 2.

H335: STOT SE Respiratory tract irritant. Category 3.

H302: Harmful if swallowed. Category 4

H312: Harmful in contact with skin. Category 4

H332: Harmful if inhaled. Category 4

**Precautionary Statements** 

P261: Avoid breathing vapors.

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P264: Wash hands thoroughly after handling.

P280: Wear protective gloves, lab coat and eye/face protection.

P305+P351+P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P301+P312: If swallowed, immediately call a Poison Control Center or doctor/physician.

P330: Rinse mouth.

P302+P352: If on skin, wash with plenty of soap and water.

P363: Wash contaminated clothing before reuse.

P304+340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.

3.0	Composition				
3.1	Chemical characterization of the preparatio		the preparation	n Calcium hydroxide and lodoform in a silicone-based paste.	
3.2	Hazardous ingredients				
	CAS Number	Name of the Ingredient	Concentration	Classification per 67/548/EEC	Classification per Regulation (EC) No.1272/2008 (CLP)
	1305-62-0	Calcium Hydroxide	20-30 %	Xi (Irritant); R20/21/22, R36/37/38	Skin irritation, 2, H315 Eye irritation, 2, H319
	75-47-8	lodoform	30-40 %	Xn (Harmful); R41, R20/21/22	STOT SE Respiratory tract irritant, 4, H335 Acute toxicity (oral), 4, H302 Acute toxicity (dermal), 4, H312 Harmful if inhaled, 4, H332
4.0	First Aid M	leasures			
4.1	· !			ngestion or contact with eyes ased paste, as in this product	ve. lodoform is considered harmful by inhalation, or skin. However, when combined in a siliconet, they present a moderate hazard of irritation with its safety data sheet to medical personnel. Get certainty.
4.2	Eye Contact			Move eyelids apart; flush with running water for 15+ minutes. Get medical attention.	
4.3	Skin Contact			Remove any contaminated clothing. Wipe off excess from skin. Immediately flush skin with running water. Get medical attention if irritation persists.	
4.4	Ingestion		p	ersonnel. Give large amour	not induce vomiting unless directed by medical nts of water to dilute. Get immediate medical e amount. Never give anything by mouth to an
4.5	Inhalation			Move to fresh air. If necessary, administer artificial respiration and/or oxygen and seek immediate medical attention.	
4.6	Precautions for first responders		lers V	Wear safety glasses and gloves to prevent contact.	
4.7	Information for physician				
	Symptoms		lı	Irritation, pain or redness in eyes, on skin, on mucous membranes.	
	Hazards		n	May be irritating to eyes, skin, respiratory system, gastrointestinal tract or mucous membranes. May cause burns, especially with prolonged exposure. There is a risk of serious damage to eyes.	
	Treatment			Same as First Aid above.	

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5.0	Fire Fighting Measures		
5.1	Suitable extinguishing media	Not a fire hazard. Extinguish fire with agent suitable for surrounding fire.	
5.2	Extinguishing media to avoid	None	
5.3	Special exposure hazards in a fire	Toxic gases and vapors may be released under fire conditions.	
5.4	Special protective equipment for fire-fighters	Self-contained breathing apparatus; full, protective clothing.	
6.0	Accidental Release Measures		
6.1	Personal precautions.	Wear chemical splash goggles, impervious gloves, lab coat with long sleeves and shoe covers.	
6.2	Environmental precautions	Avoid release into the environment.	
6.3	Method for clean up	Scrape / wipe up with damp paper towels. Wash spill area with detergent and water. Place spill and absorbent towels in covered container for disposal.	
7.0	Handling and Storage		
7.1	Handling	For use by dental professionals only. Wear gloves, safety glasses; wash hand after use. Avoid unnecessary exposure. Follow good hygiene practices.	
7.2	Storage	Remove applicator tip immediately after use. Keep tightly capped in original container. Store at cool room temperature (<25°C) in a well-ventilated area. Avoid extremes of temperature (>27°C/80°F, <5°C/40°F) and acids.	
7.3	Specific uses	Dental preparation	
	Exposure Controls / Personal Protection		
8.0	Exposure Controls / Personal Protect	tion	
<b>8.0</b> 8.1	Exposure Controls / Personal Protect  Exposure limit values	Calcium hydroxide powder: PEL/TLV 5 mg/m³ Iodoform: 0.6 ppm (10 mg/m³	
	•	Calcium hydroxide powder: PEL/TLV 5 mg/m <sup>3</sup>	
8.1	Exposure limit values	Calcium hydroxide powder: PEL/TLV 5 mg/m <sup>3</sup>	
8.1	Exposure limit values  Exposure controls	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under	
8.1 8.2 8.2.1	Exposure limit values  Exposure controls  Occupational exposure controls	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.	
8.1 8.2 8.2.1 8.2.1.1	Exposure limit values  Exposure controls  Occupational exposure controls  Respiratory protection	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.	
8.1 8.2 8.2.1 8.2.1.1 8.2.1.2	Exposure limit values  Exposure controls Occupational exposure controls  Respiratory protection Hand protection	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.  No special requirements other than the usual surgical gloves.	
8.1 8.2 8.2.1 8.2.1.1 8.2.1.2 8.2.1.3	Exposure limit values  Exposure controls Occupational exposure controls  Respiratory protection Hand protection Eye protection	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.  No special requirements other than the usual surgical gloves.  No special requirements other than the usual safety glasses.	
8.1 8.2 8.2.1 8.2.1.1 8.2.1.2 8.2.1.3 8.2.1.4	Exposure limit values  Exposure controls  Occupational exposure controls  Respiratory protection  Hand protection  Eye protection  Skin protection	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors. No special requirements other than the usual surgical gloves.  No special requirements other than the usual safety glasses.  Good personal hygiene and safety practices; wearing a lab coat.	
8.1 8.2 8.2.1 8.2.1.1 8.2.1.2 8.2.1.3 8.2.1.4 8.2.1.5	Exposure limit values  Exposure controls Occupational exposure controls  Respiratory protection Hand protection Eye protection Skin protection Other controls	Calcium hydroxide powder: PEL/TLV 5 mg/m³ Iodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.  No special requirements other than the usual surgical gloves.  No special requirements other than the usual safety glasses.  Good personal hygiene and safety practices; wearing a lab coat.  Emergency eye wash fountain. Wash hands after use.  Avoid release into environment as calcium hydroxide may cause pH variation	
8.1 8.2 8.2.1 8.2.1.1 8.2.1.2 8.2.1.3 8.2.1.4 8.2.1.5 8.2.2	Exposure limit values  Exposure controls  Occupational exposure controls  Respiratory protection  Hand protection  Eye protection  Skin protection  Other controls  Environmental exposure controls	Calcium hydroxide powder: PEL/TLV 5 mg/m³ Iodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.  No special requirements other than the usual surgical gloves.  No special requirements other than the usual safety glasses.  Good personal hygiene and safety practices; wearing a lab coat.  Emergency eye wash fountain. Wash hands after use.  Avoid release into environment as calcium hydroxide may cause pH variation	
8.1 8.2 8.2.1 8.2.1.1 8.2.1.2 8.2.1.3 8.2.1.4 8.2.1.5 8.2.2	Exposure limit values  Exposure controls Occupational exposure controls  Respiratory protection Hand protection Eye protection Skin protection Other controls Environmental exposure controls  Physical and Chemical Properties	Calcium hydroxide powder: PEL/TLV 5 mg/m³ Iodoform: 0.6 ppm (10 mg/m³ .  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.  No special requirements other than the usual surgical gloves.  No special requirements other than the usual safety glasses.  Good personal hygiene and safety practices; wearing a lab coat.  Emergency eye wash fountain. Wash hands after use.  Avoid release into environment as calcium hydroxide may cause pH variation	
8.1 8.2 8.2.1.1 8.2.1.2 8.2.1.3 8.2.1.4 8.2.1.5 8.2.2 9.0 9.1	Exposure limit values  Exposure controls Occupational exposure controls  Respiratory protection Hand protection Eye protection Skin protection Other controls Environmental exposure controls  Physical and Chemical Properties Characteristics	Calcium hydroxide powder: PEL/TLV 5 mg/m³ lodoform: 0.6 ppm (10 mg/m³  Wear safety glasses, lab coat and gloves. No other equipment required under normal conditions of use of this product in the quantity provided.  Good general ventilation is sufficient to control any airborne vapors.  No special requirements other than the usual surgical gloves.  No special requirements other than the usual safety glasses.  Good personal hygiene and safety practices; wearing a lab coat.  Emergency eye wash fountain. Wash hands after use.  Avoid release into environment as calcium hydroxide may cause pH variation and iodoform may be harmful.	

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11.5 11.6 11.7 <b>12.0</b> 12.1	Reproductive Toxicity Empirical data Clinical Experience  Ecological Information  Ecotoxicity	Not available  Similar calcium hydroxide/iodoform preparations have been marketed to and used safely and effectively by dental professionals for many years.  Avoid release into environment as calcium hydroxide may cause pH
11.6 11.7	Empirical data Clinical Experience	Not available Similar calcium hydroxide/iodoform preparations have been marketed to
11.6	Empirical data	Not available Similar calcium hydroxide/iodoform preparations have been marketed to
	•	,
11.5	Reproductive Toxicity	representative terminity.
	Carcinogenicity, Mutagenicity,	Not considered a carcinogen, mutagen, teratogen or a cause of reproductive toxicity.
11.4	Sub-acute, sub-chronic and prolonged toxicity	Chronic exposure may cause skin rash, headache and skin eruptions in severe cases. Persons with pre-existing skin conditions may be more susceptible to the irritating effects of this material.
11.3	Sensitization	Not applicable.
11.2	Irritation and corrosiveness	Forendo presents a minimal health hazard under normal conditions of dental practice. Prolonged exposure may cause burns/irritation of mucous membranes, eyes, skin, gastrointestinal tract, respiratory tract, dermatitis.
11.1	Acute toxicity	lodoform, Oral rat LD₅0: 355 mg/Kg Calcium hydroxide, Oral Rat LD₅0: 7340 mg/Kg
11.0	Toxicological information	
10.4	Further information	Stable under normal conditions.
10.3	Hazardous decomposition products	Toxic iodine vapors, caustic fumes of calcium oxide, carbon monoxide, carbon dioxide, hydrogen iodide.
10.2	Materials to avoid	Strong oxidizers, acetone.
10.1	Conditions to avoid	Open flame, other ignition sources, temperature over 27°C, intense light.
10.0	Stability and reactivity	
9.2.13	Evaporation rate	Not determined
9.2.11	Vapor density	Not determined
9.2.10	Viscosity	Not determined  Not determined
9.2.9 9.2.10	Solubility in water Partition coefficient	Nil Not determined
9.2.8	Specific gravity	Not determined
9.2.7	Vapor pressure	Not determined
9.2.6	Oxidizing properties	Not determined
9.2.5	Explosive properties	Not applicable
9.2.4	Flammability (solid, gas)	Not combustible
9.2.3	Flash point	Not combustible
	Boiling point	Decomposes
9.2.2		pH > 12

Trade Name:  $\textit{FORENDO}^{\intercal M}$  PASTE, Calcium Hydroxide with Iodoform

13.0	Disposal Considerations		
13.1	Regulations	Follow all local and national government regulations in disposing material or contaminated packaging.	
14.0	Transport Information		
14.1	Restrictions	None. Not regulated.	
14.2	UN Number	None	
14.3	Technical name	Not applicable	
14.4	Packing group	Not applicable	
	IATA class	Not applicable	
15.0	Regulatory Information		
15.1	EU	Class IIa medical device under MDD 93/42/EEC.	
15.2	US FDA	Class II medical device	
15.3	Health Canada	Class III medical device	
16.0	Other information		
16.1	List of relevant R phrases	R41: Risk of serious damage to eyes R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R36/37/38: Irritating to eyes, respiratory system and skin.	
16.2	Hazard Statements	H315: Causes skin irritation. Category 2 H319: Causes serious eye irritation. Category 2. H335: STOT SE Respiratory tract irritant. Category 3. H302: Harmful if swallowed. Category 4 H312: Harmful in contact with skin. Category 4 H332: Harmful if inhaled. Category 4	
16.3	Precautionary Statements	P261: Avoid breathing vapors. P264: Wash hands thoroughly after handling. P280: Wear protective gloves, lab coat and eye/face protection. P305+P351+P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. P301+P312: If swallowed, immediately call Poison Control Center or physician. P330: Rinse mouth. P302+P352: If on skin, wash with plenty of soap and water. P363: Wash contaminated clothing before reuse. P304+340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.	
16.4	Restrictions on use	Calcium hydroxide/iodoform preparations, like Forendo, are to be use only by dental professionals who have been trained in their use.	

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16.5	Further information	The information presented herein is believed to be factual as it has been derived from the works of persons believed to be qualified experts. However, nothing contained in this information is to be taken as a warranty or representation for which Pulpdent Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.
16.6	Sources of key data	National Institute for Occupational Safety (NIOSH)
		Occupational Safety and Health Administration (OSHA)
		Eur-Lex European Union Law: Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH).
		Guidance on the compilation of safety data sheets. Version 1.1; December 2011. European Chemicals Agency
16.7	Information which has been added, deleted or revised.	This Safety Data Sheet has been revised to meet the requirements of the GHS SDS format, Regulations (EC) No. 1272/2008 (CLP) and (EC) No. 1907/2006 (REACH). Specifically, Sections 2.1, 2.2, 3.2, 16.2, 16.3 have been modified.