Trade Name: GLASS IONOMER CEMENTS

1.0	Commercial Product Name and Supplier				
1.1	Commercial product name / designation	GlassBase™ GlassCore™ GlassFill™ OrthoChoice™ G	(	GlassLine GlassLute Band Cerr	TM
1.2 1.2.2 1.2.3	Application / Use SIC Use Category	Dental material for use by dental professional only. 851 Human health activity 55			
1.3	Manufacturer  **Pulpdent Corporation** 80 Oakland Street P.O. Box 780  Watertown, MA 02472 USA	Telephone: 1 617 926 Fax: 1 617 926-6262 Email: Pulpdent@pul			
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour / USA)			
1.5	Authorized European Representative International Business Solutions Ltd. 54 Mayfield Ridge, Hatch Warren Basingstoke, RG22 4RS UK	Tel: 07989 407479 Fax: 01256 350330 Email: <u>s.williams5@b</u>	tconnect.co.uk		
2.0	Hazards Identification				
2.1	Classification				
2.11	Classification according to Regulation (EC) No 1272/2008 [CLP]	Hazard Class  Eye irritation STOT SE Skin irritation Skin sensitization	Hazard Categ 2 3 2 1	<u>iory</u>	Hazard Statement H319 H335 H315 H317
2.1.2	Classification according to Directive 67/548/EEC (See SECTION 16 for full text of risk phrases)	Irritant (Xi); R 36/37/38 - 43			
2.2	GHS Label Elements Hazard Pictograms				

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Signal Word: WARNING

Restricted to use by dental professional only.

**Hazard Statements** 

H319: Eye irritation. 2. May cause eye irritation. H335: STOT SE. 3. May cause respiratory irritation. H315: Skin irritation. 2. May cause skin irritation.

H317: Sensitization. 1. May cause an allergic skin reaction.

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#### **Precautionary Statements**

P261: Avoid breathing powder/dust.

P280: Wear protective gloves and eye protection

P305+P351: If in eyes, rinse cautiously with water for several minutes.

P337+P313: If eye irritation persists, get medical advice/attention.

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

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

P333+P313: If irritation or rash occurs, get medical advice/attention.

3.0	Composition					
3.1	Chemical characterization of the preparation:			Glass ionomer cements in two parts, powder and liquid, that are mixed together just before use.		
3.2	Hazardous ingr	- '				
	CAS Number	Name of the Ingredient	Concentration	Classification according to 67/548/EEC	Classification according to Regulation (EC) No.1278/2008 (CLP).	
Powder		Alumino-fluorosilicate glass	92-100%	Xi (irritant); R: 36/37/38	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315	
Liquid	9003-01-4	Polyacrylic acid	30-40%	Xi (irritant); R: 36/37/38-43	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315 Skin sensitization, 1, H317	
4.0	First Aid Measures					
4.1	Special Instructions		skin. Liquid r contact. Show	May be irritating to eyes, respiratory system, mucous membranes and skin. Liquid may cause sensitization by prolonged or repeated skin contact. Show this safety data sheet to medical personnel. Get medical attention in case of uncertainty.		
4.2	Inhalation		Move to fresh air. If necessary, administer oxygen and/or artificial respiration and seek medical attention.			
4.3	Skin Contact		Wash skin thoroughly with soap and running water.			
4.4	Eye Contact			apart and flush with rui	nning water for 15+ minutes. Get	
4.5	Ingestion		Rinse mouth a to an unconsc		on. Never give anything by mouth	
4.6	Precautions for first responders		Wear safety g the air, wear d		coat. If powder has dispersed into	
4.7	Information for physician					
	Symptoms		Red and/or irri	itated eyes, mucous mer	mbranes or skin.	
	Hazards				system, mucous membranes and by prolonged or repeated skin	
	Treatment		Same as abov	e under First Aid.		

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5.0	Fire Fighting Measures		
5.1	Suitable extinguishing media	Carbon dioxide, dry chemical, alcohol foam, or water fog. Water spray may be used to keep fire exposed containers cool.	
5.2	Extinguishing media to avoid	Do not use direct water stream	
5.3	Special exposure hazards in a fire	Heat may cause polymerization with rapid release of energy.	
5.4	Special protective equipment for fire-fighters	A self-contained breathing apparatus should be worn by firefighting personnel. Cool exposed containers with water spray to prevent polymerization under fire conditions.	
6.0	Accidental Release Measures		
6.1	Personal precautions.	Ventilate area. Wear gloves, lab coat and safety glasses.	
6.2	Environmental precautions	Contain spilled material. Follow all government regulations.	
6.3	Method for clean up	Absorb or wipe up spill with suitable material (paper towels or cloths). Collect for disposal in a covered container. Wash area of spill with alcohol or soap and water.	
7.0	Handling and Storage		
7.1	Handling	For use only by dental professionals trained in the use of dental materials. Follow good hygiene practices. Cap product immediately after use. Avoid cross contamination between parts and dispersion of powder into the air.	
7.2	Storage	Keep containers tightly closed. Store product in original container at cool room temperature (< 25°C). Avoid getting powder wet; avoid direct, strong light and extremes of temperature (>27°C/80°F, <5°C/40°F). Shelf life for unopened product is three years from date of manufacture, provided that the material has been stored properly.	
7.3	Specific uses	Dental material	
8.0	Exposure Controls / Personal Protection		
8.1	Exposure limit values	PEL: Not established 10 ppm TLV: Not established 10 ppm	
8.2	Exposure controls		
8.2.1	Occupational exposure controls	No special equipment required under normal conditions of use of this product in the quantity provided.	
8.2.1.1	Respiratory protection	No special equipment required under normal conditions of use.	
8.2.1.2	Hand protection	No special requirements. Surgical gloves will limit contact with the glass ionomer liquid.	
8.2.1.3	Eye protection	No special requirements other than the usual safety glasses.	
8.2.1.4	Skin protection	No special requirements. Good personal hygiene and safety practices should protect dental staff from unnecessary exposure to material.	
8.2.1.5	Other controls	Emergency eye wash fountain should be close by. Wash hands after use.	

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8.2.2 Environmental exposure controls Powder is inert. Liquid should not be discharged into environment.

Follow all government regulations.

9.0	Physical and Chemical Properties			
9.1	Appearance	Powder	<u>Liquid</u>	
9.1.1	Color	Depends on product	Colorless to pale yellow	
9.1.2	Odor	None	Mild, characteristic	
9.1.3	Physical state	Fine powder	Viscous liquid	
9.2	Important health, safety and environmental information			
9.2.1	рН	Not applicable	5.50	
9.2.2	Boiling point	Not applicable	100°C	
9.2.3	Flash point	Not applicable	> 110°C	
9.2.4	Flammability (solid, gas)	Not applicable	Not applicable	
9.2.5	Explosive properties	Not applicable	Not applicable	
9.2.6	Oxidizing properties	Not determined	Not determined	
9.2.7	Vapor pressure	<1 mm Hg / 133 Pa	17 mm Hg	
9.2.8	Specific gravity	5.650	1.250 to1.150 (depending on product)	
9.2.9	Solubility in water	Nil	Dilutable	
9.2.10	Partition coefficient	Not applicable	Not determined	
9.2.11	Viscosity	Not applicable	Not determined	
9.2.12	Vapor density	Not applicable	0.62	
9.2.13	Evaporation rate	Not applicable	<1	
10.0	Stability and reactivity			
10.1	Conditions to avoid	Temperature > 38°C, cross-	Temperature > 38°C, cross-contamination.	
10.2	Materials to avoid	Powder: Strong acids.		
		Liquid: acids, bases, ammo hydroxide and strongly basi	nia, sodium hydroxide, potassium c amines	
10.3	Hazardous decomposition products	Carbon monoxide, carbon o	Carbon monoxide, carbon dioxide, acrylic monomers.	
10.4	Further information	Stable if stored and used as	Stable if stored and used as directed.	
11.0	Toxicological information			
11.1	Acute toxicity		Not toxic. Minimal health hazard in the quantities present in this product and under normal conditions of use.	
11.2	Irritation and corrosiveness		yes, respiratory system, mucous act or with prolonged exposure.	

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11.3	Sensitization	May be sensitizing. Prolonged/frequent skin contact with liquid may cause allergic skin reaction in those sensitive to acrylics.
11.4	Sub-acute, sub-chronic and prolonged toxicity	Prolonged/frequent skin contact may cause eye, skin, mucous membrane and respiratory system irritation.
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	None known
11.6	Empirical data	Not available
11.7	Clinical Experience	Glass Ionomer Cements have been on the market and used safely and effectively in the US and internationally for more than 25 years.
12.0	Ecological Information	
12.1	Ecotoxicity	To the best of our knowledge, Glass Ionomer Powders are inert. Glass Ionomer Liquids should not be discharged into the environment. Follow all government regulations.
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.
15.0	Regulatory Information	
15.1	EU	Class IIa medical device under the MDD 93/42/EEC.
15.2	US FDA	Class II medical device
16.0	Other information	
16.1	List of relevant R phrases	R36/37/38, Irritating to eyes, respiratory system and skin R43, Sensitizing by skin contact
16.2	Hazard Statements	H261: Avoid breathing powder/dust.
		H319: Eye irritation. Hazard category 2.
		H335: Specific Target Organ Toxicity - Single exposure; hazard category. 3. Respiratory tract irritation.
		H315: Skin irritation. Hazard category 2.
		H317: Skin Sensitization. Hazard category 1.
16.3	Precautionary Statements	P280: Wear protective gloves and eye protection
		P304+340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
		P305+P351: If in eyes, rinse cautiously with water for several minutes.
		P337+P313:If eye irritation persists, get medical advice/attention.
		P302+P352: If on skin, wash with plenty of soap and water.
		P333+P313: If irritation or rash occurs, get medical advice / attention.

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16.4	Restrictions on use	Glass Ionomer Cements are for use by dental professionals only.
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)
		US 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
16.6	Information which has been added, deleted or revised.	This Safety Data Sheet has been revised to meet the requirements of the GHS SDS format and 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.

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