SAFETY DATA SHEETS

This SDS packet was issued with item: 070451393

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

070447458 070447466 070447474 070447482 070447490 070447508 070451401 070451419 075890702 075890710 075890728 075890736 075890744 075890777 075890785 075890793 075890801 075890819 075890843 075890850

Pulpdent Corporation

Safety Data Sheet

1.0	Commercial Product Name and Sup	oplier				
1.1	Commercial product name		ACTIVA BioACTIVE-BASE / LINER ACTIVA BioACTIVE-RESTORATIVE			
1.2 1.2.2	Application / Use SIC		Dental material for use by dental professional only. 851 Human health activity			
1.2.3	Use Category	55				
1.3	Manufacturer, Importer					
1.3.1	Manufacturer					
	Pulpdent Corporation 80 Oakland Street P.O. Box 780 Watertown, MA 02472 USA	Telephone: 1 61 Fax: 1 61 Email: <u>Pulpdent</u>	7 926-6262			
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 4F	Email [,] s williams	79 / Fax: 01256 350330 5 <u>5@btconnect.co.uk</u>			
2.0	Hazards Identification					
2.1	Classification					
2.1.1	Classification according to Regulation (EC) No 1272/2008 [CLP]	<u>Hazard Class</u> Eye irritation STOT SE Skin irritation Skin sensitization	Hazard Category 2 3 2 1	Hazard Statement H319 H335 H315 H317		
2.1.2	Classification according to Directive 6 (See SECTION 16 for full text of risk p		; R 36/37/38 - 43			
2.2	GHS Label Elements					
	Hazard Pictograms					
	(!)					
	Signal Word: WARNING					
	Restricted to use by dental profess	ional 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.					
	Precautionary Statements P261: Avoid breathing vapor. P280: Wear protective gloves and eye P305+P351: If in eyes, rinse cautiousl P337+P313: If eye irritation persists, g	y with water for several minute	9S.			

Trade Name: ACTIVA BioACTIVE PRODUCTS

P302+P352: If on skin, wash with plenty of soap and water. P333+P313: If irritation or rash occurs, get medical advice/attention. P410+P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.

3.0 Composition

3.1 Resin-modified glass ionomer dental material Chemical characterization of the preparation:

Hazardous ingredients 3.2

3.2 Hazardous ingredients									
	CAS Number	Name of the Ingred	lient	Concentration BASE/LINER	Concentration RESTORATIVE	Classification per 67/548/EEC	Classification per Regulation (EC) No.1278/2008 (CLP).		
	Proprietary	Proprietary Blend of diurethane other methacrylates modified polyacrylic		with	44.6%	Irritant; Xi R 3637//38 - 43	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315 Skin sensitization, 1, H317		
	112945-52-5	Silica, amorphous		3.0%	6.7%	Irritant; Xi, R 36/37/38	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315		
	7681-49-4	Sodium fluoride		0.90%	0.75%	Harmful (Xn); R22-36/38	Acute toxicity, 4, H302 Skin irritation, 2, H315 Eye irritation, 2, H319		
4.0	First Aid Mea	isures							
4.1	General Information		Dono	May be irritating to eyes, respiratory system and skin. Avoid contact with eyes and skin. Do not inhale vapors. May cause sensitization by skin contact. Show this safety data sheet to medical personnel. Get medical attention in case of uncertainty.					
4.2	Inhalation		Move to fresh air. Administer oxygen/CPR as needed. Seek medical attention.						
4.3	Skin Contact		Take off contaminated clothing. Wash skin thoroughly with soap and water.						
4.4	Eye Contact		Keep eyelids apart; flush with running water for 15+ minutes. Get medical attention.						
4.5	Ingestion		Rinse mouth with water. Do not induce vomiting. Get immediate medical attention. May be irritating to mucous membranes. Never give anything by mouth to an unconscious person.						
4.6	Precautions for	or first responders	Ventil	ate the area. We	ear eye and skin p	rotection.			
4.7	Information fo	r physicians							
	Symptoms		Irritation or redness in eyes, throat or on skin.						
	Hazards		May be irritating to eyes, respiratory system, skin. May be sensitizing by skin contact.						
	Treatment		As ab	ove under First	Aid.				
5.0	Fire Fighting	Measures							
5.1	Suitable exting	guishing media	Carbon dioxide, dry chemical, alcohol foam, or water fog. Water spray may be used to keep fire exposed containers cool.				g. Water spray may be used		
5.2	Extinguishing	media to avoid	Do	not use direct w	ater stream				
5.3	Special expos	sure hazards in a fire	He	at may cause po	lymerization with	rapid release of ene	ergy.		
5.4	Special protective equipment for fire-fighters			elf-contained breathing apparatus should be worn by firefighting personnel. osed containers with water spray to prevent polymerization under fire condition					

Accidental Release Measures 6.0 6.1 Personal precautions. Wear safety glasses, gloves and lab coat.

Pulpdent Corporation

Safety Data Sheet

6.2	Environmental precautions	Avoid releasing larg		red material into the e	environment. Cured / set-	
6.3	Method for clean up	Contain spilled material. Absorb or wipe up spill with suitable material (e.g. paper towels). 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	sources, extremes	of temperature (>		. Avoid direct/strong light F), contamination, cross r use.	
7.2	Storage	(<25°C). Avoid dire	ct/strong light, sour		t cool room temperature nes of temperature. Shelf date of manufacture.	
7.3	Specific uses	Dental base/liner, c	ement or restorative)		
8.0	Exposure Controls / Personal Prot	ection				
8.1	Exposure limit values	PEL: Not establish	ned. TLV: Not estal	blished.		
8.2	Exposure controls					
8.2.1	Occupational exposure controls		-	normal conditions of t		
8.2.1.1	Respiratory protection	•	U U		trol any airborne vapors.	
8.2.1.2	Hand protection			e usual surgical glove		
8.2.1.3	Eye protection	No special require	ments other than th	e usual safety glasse	s worn by dental staff.	
8.2.1.4	Skin protection				practices and wearing a sure to uncured material.	
8.2.1.5	Other controls	Emergency eye wash fountain should be available. Wash hands after use.				
8.2.2	Environmental exposure controls	Cure material befo	ore disposing.			
9.0	Physical and Chemical Properties					
9.1	Appearance / Color			Part A	Part B	
9.1.1	Physical state / Color	Base / Liner	Two pastes:	Yellowish	Off-white	
		Restorative	Two thick pastes	Tooth-colored	Off-white	
9.1.2	Odor	Faint, characterist	ic			
9.2	Important health, safety and environn	nental information				
9.2.1	рН	Not determined				
9.2.2	Boiling point	Not determined				
9.2.3	Flash point	Not determined				
9.2.4	Flammability (solid, gas)	Not applicable				
9.2.5	Explosive properties	Not applicable				
9.2.6	Oxidizing properties	Not determined				
9.2.7	Vapor pressure	< 1 mm Hg				
9.2.8	Specific gravity		Part A	Part B		
		Base / Liner	1.460 g/mL	1.380 g/mL		
		3/5				

		Restorative	1.580 g/mL	1.620 g/mL
9.2.9	Solubility in water	Nil		
9.2.10	Partition coefficient	Not determined		
9.2.11	Viscosity	Not determined		
9.2.12	Vapor density	Not determined		
9.2.13	Evaporation rate	Not determined		
10.0	Stability and reactivity			
10.1	Conditions to avoid	Temperature > 3	8°C, intense light,	cross-contamination.
10.2	Materials to avoid	Reducing and ox	didizing agents, pe	roxides, amines.
10.3	Hazardous decomposition products			eater than that supplied in this product may ase of oxides of carbon and nitrogen.
10.4	Further information		f stored and used rial is exposed to d	as directed. Polymerization will occur when lirect light.
11.0	Toxicological information			
11.1	Acute toxicity			esent a minimal health hazard under normal ies necessary for dental procedures.
			Oral rat LD ₅₀ : 180	
			s: Oral rat LD50: 3	
11.2	Irritation and corrosiveness		g to eyes, respira rolonged exposure	tory tract, mucous membranes or skin on e.
11.3	Sensitization		ng. Prolonged or fr e susceptible indiv	requent skin contact may cause allergic skin iduals.
11.4	Sub-acute, sub-chronic and prolonged toxicity	susceptible indiv	viduals. Prolonged	ontact may cause allergic skin reactions in exposure to large amounts (more than in espiratory irritation.
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	None known		
11.6	Empirical data	Biocompatibility	has been tested ar	nd found to be acceptable.
11.7	Clinical experience			are new products that have been evaluated been no reports of adverse events.
12.0	Ecological Information			
12.1	Ecotoxicity	knowledge, poly		I into the environment. To the best of our is inert. No other information is available.
13.0	Disposal Considerations			
13.1	Regulations	Follow all local contaminated pa		rnment regulations in disposing material or
14.0	Transport Information			
14.1	Restrictions	None. Not regula	ated.	

15.0	Regulatory Information			
15.1	EU	Class IIA medical devices under MDD 93/42/EEC.		
15.2	US FDA	Class II medical devices.		
15.3	Health Canada	Class III medical devices		
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	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	P261: Avoid breathing vapor.		
		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.		
		P333 + P313: If irritation or rash occurs, get medical advice / attention.		
		P410 + P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.		
16.4	Restrictions on use	ACTIVA BioACTIVE PRODUCTS are to be sold to and used 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		
16.7	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.		

Trade Name: ACTIVA BioACTIVE-BASE / LINER

1.0	Commercial Product Name and Supplier	
1.1	Commercial product name	ACTIVA BioACTIVE-BASE / LINER
1.2	Application / Use	Dental material for use by dental professional only.
1.2.2	SIC	851 Human health activity
1.2.3	Use Category	55
1.3	Manufacturer	
	<i>Pulpdent Corporation</i> 80 Oakland Street, P.O. Box 780 Watertown, MA 02472 USA	Telephone: 1 617 926-6666 / Fax: 1 617 926-6262 Email: <u>Pulpdent@pulpdent.com</u>
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour / USA)
1.5	Authorized European Representative	Advena Limited Tower Business Centre, 2nd Floor, Tower Street, Swatar, BKR 4013 Malta

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
		Eye irritation	2	H319
		STOT SE	3	H335
		Skin irritation	2	H315
		Skin sensitization	1	H317

- 2.1.2 Classification according to Directive 67/548/EEC
- Irritant; Xi; R 36/37/38 43 (See SECTION 16 for full text of risk phrases)

2.2 GHS Label Elements

Hazard Pictograms



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.

Precautionary Statements

P261: Avoid breathing vapor.

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.

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

Trade Name: ACTIVA BioACTIVE-BASE / LINER

P410+P411: Protect from sunlight. Store at temperature not exceeding 27°C / 80°F.

3.0	Composition						
3.1	Chemical character	acterization of the preparation:		Bioactive ionic r	Bioactive ionic resin with reactive glass filler		
3.2	Hazardous ingredie	ents					
	CAS Number	Name of the	Ingredient	Concentration	Classification per 67/548/EEC	Classification per Regulation (EC) No.1272/2008 (CLP).	
	Proprietary	Proprietary Blend of diure other methacr modified polya		/lates with	Irritant; Xi R 3637//38 - 43	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315 Skin sensitization, 1, H317	
	112945-52-5	Silica, amorph	ious	3.0%	Irritant; Xi, R 36/37/38	Eye irritation, 2, H319 STOT SE 3, H335 Skin irritation, 2, H315	
	7681-49-4	Sodium fluoric	le	0.90%	Harmful (Xn); R22-36/38	Acute toxicity, 4, H302 Skin irritation, 2, H315 Eye irritation, 2, H319	
4.0	First Aid Measure	S					
4.1	General Information May be irritating to eyes, respiratory system and skin. Avoid contact with eyes skin. Do not inhale vapors. May cause sensitization by skin contact. Show this s data sheet to medical personnel. Get medical attention in case of uncertainty.			on by skin contact. Show this safety			
4.2	Inhalation		Move to free medical atte		ary, administer oxygen and/or artificial respiration. Seek		
4.3	Skin Contact		Take off co	Take off contaminated clothing. Wash skin thoroughly with soap and water.			
4.4	Eye Contact		Keep eyelic	ds apart; flush with running water for 15+ minutes. Get medical attention.			
4.5	Ingestion		Rinse mouth with water. Do not induce vomiting. Get immediate medical attention May be irritating to mucous membranes. Never give anything by mouth to unconscious person.				
4.6	Precautions for firs	t responders	Ventilate th	e area. Wear eye	and skin protection.		
4.7	Information for physicians						
	Symptoms		Irritation or redness in eyes, throat or on skin.				
	Hazards		May be irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.				
	Treatment	Treatment As		As above under First Aid.			
5.0	Fire Fighting Mea	sures					
5.1	Suitable extinguish	ing media		xide, dry chemical exposed containe		ater fog. Water spray may be used	
5.2	Extinguishing medi	a to avoid	Do not use	e direct water stream			
5.3	Special exposure h	azards in a fire	Heat may c	ause polymerizati	on with rapid release	e of energy.	
5.4	Special protective of fire-fighters	equipment for	Self-contair	ned breathing appa	aratus		
6.0	Accidental Releas	se Measures					

Pulpdent Corporation

Safety Data Sheet

Trade Name: ACTIVA BioACTIVE-BASE / LINER

6.1	Personal precautions.	Wear safety glasses, gloves and lab coat.
6.2	Environmental precautions	Avoid releasing large amounts of uncured material into the environment. Cured / set- up material is, to our knowledge, inert.
6.3	Method for clean up	Contain spilled material. 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. Follow good hygiene practices. Avoid direct / strong light sources, temperature extremes (>27°C/80°F, <5°C/40°F), contamination, cross contamination. Recap immediately after use.
7.2	Storage	Store product tightly capped in original container at cool room temperature (<25°C). Avoid direct, strong light, sources of ignition and extremes of temperature. Shelf life for unopened product is two years from date of manufacture, provided that the material has been stored properly.
7.3	Specific uses	Dental base/liner
8.0	Exposure Controls / Personal Prot	tection
8.1	Exposure limit values	PEL: Not established. TLV: Not established.
8.2	Exposure controls	
8.2.1	Occupational exposure controls	No special equipment required under normal conditions of use
8.2.1.1	Respiratory protection	Good general ventilation is sufficient to control any airborne vapors.
8.2.1.2	Hand protection	No special requirements other than the usual surgical gloves worn by dental staff.
8.2.1.3	Eye protection	No special requirements other than the usual safety glasses worn by dental staff.
8.2.1.4	Skin protection	Good personal hygiene and safety practices; wearing a lab coat.
8.2.1.5	Other controls	Emergency eye wash fountain should be available. Wash hands after use.
8.2.2	Environmental exposure controls	Cure material before disposing.
9.0	Physical and Chemical Properties	
9.1	Characteristics	
9.1.1	Appearance /Color / Physical state	Two pastes: Part A is yellowish; Part B is off-white
9.1.2	Odor	Faint, characteristic
9.2	Important health, safety and environm	nental information
9.2.1	рН	Not determined
9.2.2	Boiling point	Not determined
9.2.3	Flash point	Not determined
9.2.4	Flammability (solid, gas)	Not applicable
9.2.5	Explosive properties	Not applicable
9.2.6	Oxidizing properties	Not determined
9.2.7	Vapor pressure	< 1 mm Hg
9.2.8	Specific gravity	Part A: 1.460 ± 0.02 g/mL; Part B: 1.380 ± 0.02 g/mL
		3/5

Trade Name: ACTIVA BioACTIVE-BASE / LINER

9.2.9	Solubility in water	Nil		
9.2.10	Partition coefficient	Not determined		
9.2.11	Viscosity	Not determined		
9.2.12	Vapor density	Not determined		
9.2.13	Evaporation rate	Not determined		
10.0	Stability and reactivity			
10.1	Conditions to avoid	Temperature > 38°C, intense light, cross-contamination.		
10.2	Materials to avoid	Reducing and oxidizing agents, peroxides, amines.		
10.3	Hazardous decomposition products	Under fire conditions and with amounts greater than that supplied in this product, hazardous polymerization may occur with heat build-up and release of carbon monoxide, carbon dioxide, and oxides of nitrogen.		
10.4	Further information	Stable material if stored and used as directed. Polymerization will occur when light-cured material is exposed to direct light.		
11.0	Toxicological information			
11.1	Acute toxicity	Finished product in paste form presents a minimal health hazard under normal conditions of use and in the quantities necessary for dental restoration.		
		Sodium fluoride: Oral rat LD ₅₀ : 180 mg/kg		
		Silica, amorphous: Oral rat LD ₅₀ : 3160 mg/kg		
11.2	Irritation and corrosiveness	May be irritating to eyes, respiratory tract, mucous membranes or skin on contact or with prolonged exposure.		
11.3	Sensitization	May be sensitizing. Prolonged or frequent skin contact may cause allergic skin reactions in some susceptible individuals.		
11.4	Sub-acute, sub-chronic and prolonged toxicity	Prolonged and/or frequent skin contact may cause allergic skin reactions in susceptible individuals. Prolonged exposure to large amounts (more than in this product) may cause eye and respiratory irritation.		
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	None known		
11.6	Empirical data	Biocompatibility has been tested and found to be acceptable.		
11.7	Clinical experience	Activa Base/Liner is a new product that has been evaluated by dentist consultants. There have been no reports of adverse events.		
12.0	Ecological Information			
12.1	Ecotoxicity	Avoid release of uncured material into the environment. To the best of our knowledge, polymerized material is inert. No other information is available. 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.		

Trade Name: ACTIVA BioACTIVE-BASE / LINER

15.0	Regulatory Information	
15.1	EU Regulations	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	R36/37/38: Irritating to eyes, respiratory system and skin. R43: Sensitizing by skin contact.
16.2	Hazard Statements	 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	 P261: Avoid breathing vapor. 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. P333 + P313: If irritation or rash occurs, get medical advice / attention. P410 + P411: Protect from sunlight. Store at temperature ≤ 27°C / 80°F.
16.4	Restrictions on use	Activa Base/Liner is to be sold to and used 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
16.7	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.