SAFETY DATA SHEETS

This SDS packet was issued with item:

075901913

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

075896659 075901905 075901988

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).

075896519 075896527 075896543 075896550 075896584 075896592 075914445

Trade Name: Etch-Rite 38% Phosphoric Acid Etching Gel

1.0	Commercial Product Name and Supplier			
1.1	Commercial product name / designation	Etch-Rite, 38% Phosphoric Acid Etching Gel		
1.2	Application / Use	Dental etching gel for use by dental professional only.		
1.2.2	SIC	851 Human health activity		
1.2.3	Use Category	55		
1.3	Manufacturer			
	Pulpdent Corporation 80 Oakland Street, P.O. Box 780 Watertown, MA 02472 USA	Telephone: 1 617 9: Email: Pulpdent@pt	26-6666; Fax: 1 617 926-6 ulpdent.com	262
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour Emergency / USA)		
1.5	Authorized European Representative	Advena Ltd. Pure Offices, Plato Close Warwick, CV34 6WE United Kingdom		
2.0	Hazards Identification			
2.1	Classification			
2.1.1	Classification according to Regulation	Hazard Class	Hazard Category	Hazard Statement
	(EC) No. 1272/2008 [CLP]	Skin corrosion Eye irritation	1B 2	H314 H319
2.1.2	Classification according to Directive 67/548/EEC (See SECTION 16 for full text of risk phrases)	Corrosive (C); R	2 34; R 36 / 37 / 38	
2.2	OUC Label Flamente			

Revision Date: May 1, 2017

2.2 GHS Label Elements

Hazard Pictograms



Signal Word: **DANGER**

Restricted to use by dental professional only.

Hazard Statements

H314: Causes severe skin burns and eye damage.

H319: Causes serious eye irritation.

Precautionary Statements

P264: Wash hands thoroughly after handling.

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

P301 + P330 + P331: If swallowed, rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: If on skin (or hair), remove all contaminated clothing. Rinse skin with water.

P363: Wash contaminated clothing before reuse.

P310: Immediately call a Poison Center or doctor/physician.

P305 + P351 + P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until pH of tears is 7.

Revision Date: May 1, 2017

3.0	Composition				
3.1	Chemical characterization of the preparation Phosphoric acid in a gel matrix.				
3.2	Hazardous ingredients				
	CAS Number	Name of the Ingredient	Concentration	Classification per 67/548/EEC	Classification per Regulation (EC) No.1272/2008 (CLP).
	7664-38-2	Phosphoric Acid	38%	Corrosive (C) R34; R36/ 37/38	Skin corrosion; 1B Eye irritant, 2
4.0	First Aid Mea	sures			
4.1	General Inform	nation	effects	ause burns or irritation to eyes, sk may be delayed. Show this safety edical attention in case of uncertaint	data sheet to medical personnel.
4.2	Eye Contact Remove contact lenses. Keep eyelids apart and flush with running wa 15+ minutes or until pH of tears is 7. Get medical attention.				
4.3	Skin Contact			liately flush skin with running wa on for persistent irritation or burns.	ter for 15 minutes. Get medical
4.4	Ingestion		immed	Rinse mouth with water. Do not induce vomiting. Give water to dilute. Ge immediate medical attention. Never give anything by mouth to ar unconscious person.	
4.5	Inhalation			Move to fresh air. If necessary, administer oxygen and/or artificial respiration and seek medical attention.	
4.6	Precautions for first responders		Ventila	Ventilate the area. Wear safety glasses, gloves and lab coat.	
4.7	Information for	r physicians			
	Symptoms			on, pain or redness in eyes, mucous e delayed so continued monitoring o	
	Hazards			ause burns or irritation to eyes, sk may be delayed.	xin or mucous membranes. Acute
	Treatment		Same	as above under First Aid.	
5.0	Fire Fighting	Measures			
5.1	Suitable exting	guishing media		fire hazard. Use water spray to kuish fire with agent suitable for surro	
5.2	Extinguishing	media to avoid	None		
5.3				horic acid can react with metals t ombustion by-products include oxid	
5.4	Special protection fighters	tive equipment for fire	e- A self-	contained breathing apparatus.	
6.0	Accidental Re	elease Measures			
6.1	Personal prec	autions.	Wear	chemical splash goggles and gloves	3.
6.2	Environmenta	I precautions		releasing large quantities into the fect pH of water or soil.	environment as phosphoric acid

Trade Name: Etch-Rite 38% Phosphoric Acid Etching Gel

	•	
6.3	Method for clean up	For small quantities (as in this product): Wear safety glasses, lab coat and gloves. Absorb or wipe up spill with dry paper towels. Place all material in covered chemical waste container for disposal. Flush spill area with water.
7.0	Handling and Storage	
7.1	Handling	For use by dental professionals only. Wear safety glasses and gloves; wash hands after use. Avoid unnecessary exposure. Follow good hygiene practices. Protect soft tissue from etchant during intraoral procedures.
7.2	Storage	Remove applicator tip after use. Keep tightly capped in original container. Store at cool room temperature. Avoid extremes of temperature (>27°C/80°F, <5°C/40°F), alkalis, sulfites, sulfides and most metals.
7.3	Specific uses	Dental etchant
8.0	Exposure Controls / Personal Protection	
8.1	Exposure limit values	TWA: 1 mg/m³ TLV: 3 mg/m³
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	Good general ventilation is sufficient to control airborne vapors.
8.2.1.2	Hand protection	No special requirements other than surgical gloves.
8.2.1.3	Eye protection	No special requirements other than safety glasses.
8.2.1.4	Skin protection	No special requirements. Good personal hygiene and safety practices, wearing a lab coat will protect from unnecessary exposure to etchant.
8.2.1.5	Other controls	Emergency eye wash fountain should be available. Protect soft tissue from etchant during intraoral procedures. Wash hands after use.
8.2.2	Environmental exposure controls	Avoid releasing large quantities of phosphoric acid into the environment as phosphoric acid may affect pH of water or soil.
9.0	Physical and Chemical Properties	
9.1		
	Appearance / Color	
9.1.1	Appearance / Color Color / Physical state	Medium blue, thixotropic gel.
9.1.1 9.1.2	••	Medium blue, thixotropic gel. Mild, characteristic
	Color / Physical state	Mild, characteristic
9.1.2	Color / Physical state Odor	Mild, characteristic
9.1.2 9.2	Color / Physical state Odor Important health, safety and environmental in	Mild, characteristic formation
9.1.2 9.2 9.2.1	Color / Physical state Odor Important health, safety and environmental in pH	Mild, characteristic formation pH 1
9.1.2 9.2 9.2.1 9.2.2	Color / Physical state Odor Important health, safety and environmental in pH Boiling point	Mild, characteristic formation pH 1 135°C
9.1.2 9.2 9.2.1 9.2.2 9.2.3	Color / Physical state Odor Important health, safety and environmental in pH Boiling point Flash point	Mild, characteristic formation pH 1 135°C Not combustible
9.1.2 9.2 9.2.1 9.2.2 9.2.3 9.2.4	Color / Physical state Odor Important health, safety and environmental in pH Boiling point Flash point Flammability (solid, gas)	Mild, characteristic formation pH 1 135°C Not combustible Not combustible
9.1.2 9.2 9.2.1 9.2.2 9.2.3 9.2.4 9.2.5	Color / Physical state Odor Important health, safety and environmental in pH Boiling point Flash point Flammability (solid, gas) Explosive properties	Mild, characteristic formation pH 1 135°C Not combustible Not combustible Not applicable
9.1.2 9.2 9.2.1 9.2.2 9.2.3 9.2.4 9.2.5 9.2.6	Color / Physical state Odor Important health, safety and environmental in pH Boiling point Flash point Flammability (solid, gas) Explosive properties Oxidizing properties	Mild, characteristic formation pH 1 135°C Not combustible Not combustible Not applicable Not determined

Revision Date: May 1, 2017

		/			
Trade Name:	Etch-Rite	38%	Phosphoric	Acid	Etching Gel

Haue	Name: Etch-Rite 38% Phosphoric Aci	a Licining Ger
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	Not applicable
10.2	Materials to avoid	Avoid contact with materials such as sulfides and sulfites that could release toxic gases. Avoid strong alkalis because high heat of reaction can generate steam. Avoid most metals because phosphoric acid can react to liberate hydrogen, a flammable gas.
10.3	Hazardous decomposition products	Avoid contact with materials such as sulfides and sulfites that could release toxic gases. Avoid strong alkalis because high heat of reaction can generate steam. Avoid most metals because phosphoric acid can react to liberate hydrogen, a flammable gas.
10.4	Further information	Stable under normal conditions of use and storage.
11.0	Toxicological information	
11.1	Acute toxicity	Not toxic
11.2	Irritation and corrosiveness	Corrosive. May cause burns or irritation to eyes, skin, mouth, throat or gastrointestinal tract. Not expected to be an inhalation hazard unless product is misted or heated at high temperatures.
11.3	Sensitization	Not applicable.
11.4	Sub-acute, sub-chronic, prolonged toxicity	None known.
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	Not considered a carcinogen, mutagen, teratogen or reproductive toxin.
11.511.6		· · · · · · · · · · · · · · · · · · ·
	Toxicity	toxin.
11.6	Toxicity Empirical data	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is
11.6 11.7	Toxicity Empirical data Clinical Experience	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is
11.6 11.7	Toxicity Empirical data Clinical Experience Ecological Information	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is safe and effective treatment in the hands of a dental professional. No specific information available. Use according to good working practices. Avoid release into the environment as it may cause pH
11.6 11.7 12.0 12.1	Toxicity Empirical data Clinical Experience Ecological Information Ecotoxicity	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is safe and effective treatment in the hands of a dental professional. No specific information available. Use according to good working practices. Avoid release into the environment as it may cause pH
11.6 11.7 12.0 12.1	Toxicity Empirical data Clinical Experience Ecological Information Ecotoxicity Disposal Considerations	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is safe and effective treatment in the hands of a dental professional. No specific information available. Use according to good working practices. Avoid release into the environment as it may cause pH variation. Follow all local and national government regulations in disposing
11.6 11.7 12.0 12.1 13.0 13.1	Toxicity Empirical data Clinical Experience Ecological Information Ecotoxicity Disposal Considerations Regulations	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is safe and effective treatment in the hands of a dental professional. No specific information available. Use according to good working practices. Avoid release into the environment as it may cause pH variation. Follow all local and national government regulations in disposing
11.6 11.7 12.0 12.1 13.0 13.1 14.0	Toxicity Empirical data Clinical Experience Ecological Information Ecotoxicity Disposal Considerations Regulations Transport Information	toxin. Not available Using phosphoric acid etchants to prepare teeth for bonding procedures is a well-established (more than 20 years), industry-accepted, dental procedure. Etching enamel with phosphoric acid is safe and effective treatment in the hands of a dental professional. No specific information available. Use according to good working practices. Avoid release into the environment as it may cause pH variation. Follow all local and national government regulations in disposing material or contaminated packaging.

Trade Name: Etch-Rite 38% Phosphoric Acid Etching Gel

14.4	IATA class	Class 8, Corrosive
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 II medical device
16.0	Other information	
16.1	List of relevant R phrases	R 34: Causes burns R 36 / 37 / 38: Irritating to eyes, respiratory system and skin.
16.2	Hazard Statements	H314: Causes severe skin burns and eye damage. H319: Causes serious eye irritation.
16.3	Precautionary Statements	P264: Wash hands thoroughly after handling. P280: Wear protective gloves, clothing and eye/face protection. P301 + P330 + P331: If swallowed, rinse mouth. Do NOT induce vomiting. P303 + P361 + P353: If on skin (or hair), remove all contaminated clothing. Rinse skin with water. P363: Wash contaminated clothing before reuse. P310: Immediately call a Poison Center or doctor/physician. P305 + P351 + P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until pH of tears is 7.
16.4	Restrictions on use	Dental etchants are to be sold to/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) 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 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.

Trade Name: Porcelain Etch Gel

1.0	Commercial Product Name and Supplie	r			
1.1	Commercial product name / designation		Porcelain Etch Gel, 9.6% Hydrofluoric Acid Gel		
1.2	Application / Use		Dental material used to etch porcelain.		
1.2.2	SIC	851	Human health ac	tivity	
1.3	Manufacturer Pulpdent Corporation 80 Oakland Street, PO Box 780 Watertown, MA 02472 USA	Telephone: 1 617 926-6666 / Fax: 1 617 926-6262 Email: Pulpdent@pulpdent.com		6-6262	
1.4	Emergency Telephone Number	1-800-535-5053 (24 Hour / USA)			
1.5	Authorized European Representative	Pur Wa	vena Ltd. e Offices, Plato Cl rwick, CV34 6WE ted Kingdom	lose	
2.0	Hazards Identification				
2.1	Classification				
2.1.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Hazard Class Acute Toxicity Skin Corrosion / Seric		Hazard Category 2 1A	Hazard Statement H300, H330, H310 H314
2.1.2	Classification according to Directive 67/54t (See SECTION 16 for full text of risk phras		T; R26/27/28 C; R35		

2.2 GHS Label Elements

Hazard Pictograms





Signal Word: DANGER

Restricted to use by dental professional only.

Hazard Statements
H300: Fatal if swallowed

H330: Fatal if inhaled.

H310: Fatal in contact with skin.

H314: Causes severe skin burns and eye damage.

Precautionary Statements

P260: Do not breathe dust/fume/gas/mist/vapors/spray

P262: Do not get in eyes, on skin or on clothing.

P264: Wash hands thoroughly after handling.

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

P301+P310: If swallowed, IMMEDIATELY call a Poison Center or doctor/physician.

P302+P350: If on skin, gently wash with soap and water.

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

P305 + P351 + P338: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until pH of tears is 7.

Trade Name: Porcelain Etch Gel

		elain Etch Gei			
3.0	Composition				
3.1	3.1 Chemical Characterization 9.6% Hydr			9.6% Hydrofluoric Acid i	n a proprietary gel base
3.2	Hazardous Ingr	edients			
	CAS Number	Name of the ingredient	Concentration	Classification per 67/548/EEC	Classification per Regulation (EC) No.1272/2008 (CLP).
	7664-39-3	Hydrofluoric acid	9.6%	T; R 26/27/28 C; R 35	Acute Toxicity; 2 Skin Corrosion / Serious eye damage, 1A
	64-17-5	Ethyl alcohol	5.3 %	Xi: R 10-36/37/38	Flammable liquid,2 Eye irritation, 2 STOT SE, 3 Skin irritation, 2
4.0	First Aid Mea	sures			
4.1	General Information		hydrofluoric aci corrosive. AVO swallowed or ab	d that has been incorp	Porcelain Etch Gel is buffered, diluted (9.6%) porated into a gel, this product is still very /ITH PRODUCT. May be fatal if inhaled, auses severe burns.
4.2	Eye Contact		Call for emergency medical care. Immediately (within 1 minute) flush eyes an surrounding skin with running water for 30-60 minutes, holding lids apart to ensur flushing of the entire surface. Get emergency medical attention only after th flushing is complete unless it can be continued during transport.		
4.3	Skin Contact		30-60 minutes medical attention during transport in well) every 15	while removing contam on only after the flushi : Apply 2.5% calcium g	nmediately flush skin with running water for ninated clothing and shoes. Get emergency ng is complete unless it can be continued pluconate gel to the exposed area (rubbing it uconate is not available, apply benzethonium e exposed area.
4.4	Ingestion		patient rinse mo		Do not induce vomiting. If conscious, have mount of water to dilute. Never give anything
4.5	Inhalation				r oxygen, artificial respiration and/or CPR as re. Have patient lie down; keep quiet, warm.
4.6	Precautions for first responders		burns may be		face shield, gloves, lab coat. Awareness of d as soon as possible. Have someone else entilate area.
4.7	Information for	physicians			
	Symptoms		Pain and rednes	ss at site of contact. Vic	tim may not initially be aware of burn.
	Hazards		May be fatal if ir	nhaled, swallowed, abso	orbed through skin. Causes severe burns.
	Treatment		in iced magnesi		burns may be treated by immersing the area to 50%) or iced water, taking care to prevent every 10 to 15 minutes.
5.0	Fire Fighting	Measures			
5.1	Suitable exting	juishing media	Carbon dioxide.	Dry chemical.	

Trade	Outcty Bata Officet				
	Name: Porcelain Etch Gel				
5.2	Extinguishing media to avoid	Water.			
5.3	Special exposure hazards in a	Porcelain Etch Gel: None likely in this product.			
	fire	Bulk Hydrofluoric acid in closed containers: Pressure will build to dangerous levels when exposed to high temperatures. Flammable when heated.			
5.4	Special protective equipment for firefighters	Firefighters should wear self-contained breathing apparatus with full face-piece operated in pressure demand or other positive pressure mode.			
6.0	Accidental Release Measures				
6.1	Personal precautions	Wear face shield or goggles, chemically resistant gloves, and buttoned up lab coat. Avoid all contact with material. Ventilate the area.			
6.2	Environmental precautions	Not indicated for the quantity of HF in this product and under normal conditions of use in a dental practice. Large amounts should not be flushed into sewer.			
6.3	Method for clean up	For a small spill (this product): Absorb or wipe up spill with inert material, such as paper towels, and transfer to container for disposal. Wash spill site.			
7.0	Handling and Storage				
7.1	Handling	For use by dental professionals only. Keep tightly capped in original container. Do not add any other material to container. Empty container may contain explosive or flammable residue.			
7.2	Industrial Hygiene	Do not allow food or drink consumption or smoking while handling. Wear protective gloves and goggles. Do not get in eyes, on skin, or on clothing. Wash hands well after use.			
7.3	Storage	Recap immediately after use. Store tightly capped in original container at cool room temperature (<25°C) and in a dry, well-ventilated area. Avoid water, heat, sparks, flame, organic substances, and direct sunlight.			
8.0	Exposure Controls / Personal Pr	rotection			
8.0	Exposure Controls / Personal Pro	PEL/TLV (HF): 3 ppm; TWA (Alcohol): 1000 ppm			
	<u> </u>				
8.1	Exposure limit values				
8.1 8.2	Exposure limit values Exposure controls Occupational exposure controls	PEL/TLV (HF): 3 ppm; TWA (Alcohol): 1000 ppm Eye protection and chemically impervious gloves are recommended for dental			
8.1 8.2 8.2.1	Exposure limit values Exposure controls Occupational exposure controls	PEL/TLV (HF): 3 ppm; TWA (Alcohol): 1000 ppm Eye protection and chemically impervious gloves are recommended for dental personnel under anticipated conditions of normal use. For the small quantity provided in this product, no special respiratory protection is required. Local mechanical exhaust ventilation should be used to maintain			
8.1 8.2 8.2.1	Exposure limit values Exposure controls Occupational exposure controls Respiratory protection	PEL/TLV (HF): 3 ppm; TWA (Alcohol): 1000 ppm Eye protection and chemically impervious gloves are recommended for dental personnel under anticipated conditions of normal use. For the small quantity provided in this product, no special respiratory protection is required. Local mechanical exhaust ventilation should be used to maintain exposure below 3 ppm. For large amounts of hydrofluoric acid, when threshold limits are exceeded (greater than 3 ppm), use self-contained breathing apparatus. Guard against aspiration into			
8.1 8.2 8.2.1 8.2.1.1	Exposure limit values Exposure controls Occupational exposure controls Respiratory protection Hand protection	PEL/TLV (HF): 3 ppm; TWA (Alcohol): 1000 ppm Eye protection and chemically impervious gloves are recommended for dental personnel under anticipated conditions of normal use. For the small quantity provided in this product, no special respiratory protection is required. Local mechanical exhaust ventilation should be used to maintain exposure below 3 ppm. For large amounts of hydrofluoric acid, when threshold limits are exceeded (greater than 3 ppm), use self-contained breathing apparatus. Guard against aspiration into lungs.			
8.1 8.2 8.2.1 8.2.1.1	Exposure limit values Exposure controls Occupational exposure controls Respiratory protection Hand protection Eye protection	PEL/TLV (HF): 3 ppm; TWA (Alcohol): 1000 ppm Eye protection and chemically impervious gloves are recommended for dental personnel under anticipated conditions of normal use. For the small quantity provided in this product, no special respiratory protection is required. Local mechanical exhaust ventilation should be used to maintain exposure below 3 ppm. For large amounts of hydrofluoric acid, when threshold limits are exceeded (greater than 3 ppm), use self-contained breathing apparatus. Guard against aspiration into lungs. Neoprene or polyethylene gloves are recommended. Safety glasses or face shield worn by dental staff is adequate under normal			

Trade Name: Porcelain Etch Gel

8.2.2 Environmental exposure controls Do not wash large amounts of any acid into sewer system.

9.0	Physical and Chemical Properties			
9.1	Characteristics			
9.1.1	Appearance /Color / Physical state	Transparent yellow gel		
9.1.2	Odor	Characteristic		
9.2	Important health, safety and environr	mental information		
9.2.1	pH value	pH <1.5		
9.2.2	Boiling Point (Hydrofluoric acid)	108.33°C		
9.2.3	Flash point	Not determined		
9.2.4	Flammability	Not applicable for Porcelain Etch Gel.		
9.2.5	Explosive properties	Not applicable for Porcelain Etch Gel. For bulk hydrofluoric acid in closed containers: Pressure will build to dangerous levels when exposed to high temperatures. Flammable when heated.		
9.2.6	Oxidizing properties	Not determined		
9.2.7	Vapor Pressure	10.00 mm Hg / 13.33 mbar / ld: E		
9.2.8	Specific Gravity	1.18		
9.2.9	Solubility in water	100%		
9.2.10	Partition coefficient	Not determined		
9.2.11	Viscosity	Not determined		
9.2.12	Vapor density	0.7		
9.2.13	Evaporation rate	Not determined		
9.2.14	Ignition temperature	Not applicable		
9.2.15	Further information	Odor Threshold: 0.04 ppm		
10.0	Stability and reactivity			
10.1	Conditions to avoid	Extremes of temperature (>27°C/80°F, <5°C/40°F), sparks, open flame, all other sources of ignition, contamination		
10.2	Materials to avoid	Water, glass, concrete, materials containing silicon, carbonates, sulfides, cyanides, alkalis, bases, reducing agents, nitric acid, organic materials, metals.		
10.3	Hazardous decomposition products	Not available		
10.4	Hazardous reactions	Strong exothermic reaction when exposed to incompatible substances. Pressure will build to dangerous levels when closed containers of hydrofluoric acid are exposed to high temperatures. Flammable when heated.		
11.0	Toxicological information			
11.1	Acute toxicity of Hydrofluoric acid (as F)	PEL/TLV: 3 ppm. Dermal LD ₅₀ mouse: 500 mg/kg. Vapor LC ₅₀ human: 50 ppm, 30 min. Causes severe burns. Destructive to tissue. Sensation may be delayed.		
11.2	Irritation and corrosiveness	Causes severe burns. Destructive to tissue. Sensation of burn may be delayed.		
11.3	Sensitization	Not a sensitizer		

Trade	Name: Porcelain Etch Gel	
11.4	Sub-acute, sub-chronic and prolonged toxicity	Not likely in the quantity and concentration available in this product.
11.5	Carcinogenicity, Mutagenicity, Reproductive Toxicity	None known.
11.6	Empirical data	None available.
11.7	Clinical experience	Pulpdent Porcelain Etch Gel has been used safely and effectively for almost twenty years to successfully prepare porcelain surfaces for bonding. There have been no reports of serious injury during that time. Many of these preparations have taken place in a dental lab where there is less danger. Sometimes, however, it is necessary to use Porcelain Etch Gel intraorally. For these cases, it is most important to have a well-trained, experienced dentist perform the procedure and to use adequate shielding of soft tissue.
12.0	Ecological Information	
12.1	Ecotoxicity	Strong acid. Large amounts of HF may damage wildlife or aquatic ecosystems. Do not flush large amounts to sewer; do not allow large amounts to flow into bodies of water.
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	UN Number	UN 1790
14.2	Technical name	Hydrofluoric Acid Preparation
14.3	IATA Class / Packing group	Class 8, 6.1, Packing Group II
14.4	Transport over land	US DOT/ IATA: Excepted Small Quantities. Maximum unit quantity: 0.5L
14.4.1	Transport Class	Class 8, 6.1, Packing Group II
14.4.2	Label	Hydrofluoric Acid Preparation. Corrosive! Toxic!
14.5	Transport at sea	US DOT/IATA: Excepted Small Quantities. On deck, under deck, passenger and cargo vessels Maximum unit quantity: 0.5L
14.5.1	Transport Class	Class 8, 6.1, Packing Group II
14.5.2	Label	Hydrofluoric Acid Preparation; Corrosive! Toxic!
14.6	Air transport	US DOT/ IATA: Excepted Small Quantities. Maximum unit quantity: 30 ml
14.6.1	Transport Class	Class 8, 6.1, Packing Group II
14.6.2	Label	Hydrofluoric Acid Preparation. Corrosive! Toxic!
14.7	Further information	No aluminum or glass containers. Packaging must be very secure to prevent leaks and breakage.
15.0	Regulatory Information	
15.1	EU	Class I medical device under the MDD 93/42/EEC.
15.2	US FDA	Class II medical device
15.3	Health Canada	Class III medical device

Trade Name: Porcelain Etch Gel

16.0	Other information	
16.1	List of the relevant R phrases	R 35: Causes severe burns R 26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.
16.2	Hazard Statements	H300: Fatal if swallowed H330: Fatal if inhaled. H310: Fatal in contact with skin. H314: Causes severe skin burns and eye damage.
16.3	Precautionary Statements	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P262: Do not get in eyes, on skin or on clothing. P264: Wash hands thoroughly after handling. P280: Wear protective gloves, lab coat and eye/face protection. P301 + P310: If swallowed, immediately call Poison Center or doctor/physician. P302 + P350: If on skin, gently wash with soap and water. P304 + 340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 + P351 + P338: If in eyes, rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing until pH of tears is 7.
16.4	Restrictions on use	Porcelain Etch Gel 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) 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, Regulation (EC) No. 1272/2008 (CLP) and Regulation (EC) No. 1907/2006 (REACH). Specifically, Sections 2.1, 2.2, 3.2, 16.2, 16.3 have been modified.

Revision Date: May 1, 2017