

Safety Data Sheet

Section 1: Identification of the material and the Supplier

Product identifier	IPS Ceramic Etching Gel
Product use	Etching gel for dental ceramic
Distributor information	
Company identification	Ivoclar Vivadent (NZ) Ltd
Address	12 Omega Street, Rosedale, Auckland, New Zealand
Telephone Number	0508 486 252
Emergencies within New Zealand	0800 764 766 (National Poison Control Centre)

Section 2: Hazards Identification

Product is classified as hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

EPA Approval Code HSR001589



Toxic



Chronic



Corrosive



Ecotoxic

Hazard Classification	Hazard Code	Hazard Statement
6.1C (Oral)	H301	Toxic if swallowed
6.1C (Dermal)	H311	Toxic in contact with skin
6.1C (Inhalation, Vapour)	H331	Toxic if inhaled
6.9A	H370	Causes damage to organs
8.1A	H290	May be corrosive to metals
8.2C	H314	Causes severe skin burns and eye damage
8.3A	H318	Causes serious eye damage
9.3B	H432	Toxic to terrestrial vertebrates

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove 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.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.
P310	Immediately call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment see Section 4. First Aid Measures.
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
Storage Code	Storage Statement
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations.

Section 3: Composition/Information on Ingredients

Chemical characterization	Mixtures	
Description	Mixture of substances listed below with non-hazardous additions.	
Dangerous components:		
CAS: 7664-39-3	hydrofluoric acid	2.5-<7%
EINECS: 231-634-8	Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; Skin Corr. 1A, H314	
Additional information	For the wording of the listed risk phrases refer to section 16.	

Section 4: First Aid Measures

Description of first aid measures:	
General information	Immediately remove any clothing soiled by the product.
After inhalation	Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation.
After skin contact	Immediately wash with water and soap and rinse thoroughly. Rub in Ca-gluconate solution or Ca-gluconate gel immediately. Seek medical treatment.
After eye contact	Rinse opened eye for several minutes under running water. Seek immediate medical advice.
After swallowing	Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Indication of any immediate medical attention and special treatment needed	Antidote: Ca-gluconate solution / Ca-gluconate gel

Section 5: Fire Fighting Measures

Extinguishing media:	
Suitable extinguishing agents	The product is not flammable. Use fire extinguishing methods suitable to surrounding conditions.
Special hazards arising from the substance or mixture	Formation of toxic gases is possible during heating or in case of fire.
Advice for firefighters:	
Protective equipment	Mouth respiratory protective device.
Additional information	Cool endangered receptacles with water spray.


Section 6: Accidental Release Measures


Personal precautions, protective equipment and emergency procedures	Wear protective equipment. Keep unprotected persons away.
Environmental precautions	Do not allow to enter sewers/surface or ground water.
Methods and material for containment and cleaning up:	Use neutralizing agent. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Alternative: Add IPS Ceramic neutralizing powder and wait for 5 minutes. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
Reference to other sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

Section 7: Handling and Storage

Precautions for safe handling	Only adequately trained personnel should handle this product. For use in dentistry only. Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
Information about fire - and explosion protection	Keep respiratory protective device available.
Conditions for safe storage, including any incompatibilities:	
Storage:	
Requirements to be met by storerooms and receptacles	Store only in the original receptacle. The hydrofluoric acid in IPS Ceramic Etching Gel attacks quartz, silicate and borate glasses, as well as sanitary ceramics and various metals and alloys (e.g. high-grade steel). Nickel, copper, polyethylene, PVC, and Teflon are resistant to hydrofluoric acid.
Information about storage in one common storage facility	Store away from flammable substances.
Further information about storage conditions	Keep container tightly sealed. Protect from exposure to the light. Protect from heat and direct sunlight.
Specific end use(s)	No further relevant information available.

Section 8: Exposure Controls/Personal Protection

Additional information about design of technical facilities	No further data; see item 7.						
Control parameters:							
<table border="1"> <tr> <th colspan="2">Ingredients with limit values that require monitoring at the workplace:</th> </tr> <tr> <td colspan="2">CAS: 7664-39-3 hydrofluoric acid</td> </tr> <tr> <td>WEL</td> <td>Short-term value: 2.5 mg/m³, 3 ppm Long-term value: 1.5 mg/m³, 1.8 ppm</td> </tr> </table>		Ingredients with limit values that require monitoring at the workplace:		CAS: 7664-39-3 hydrofluoric acid		WEL	Short-term value: 2.5 mg/m ³ , 3 ppm Long-term value: 1.5 mg/m ³ , 1.8 ppm
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WEL	Short-term value: 2.5 mg/m ³ , 3 ppm Long-term value: 1.5 mg/m ³ , 1.8 ppm						
Additional information	The lists valid during the making were used as basis.						
Exposure controls:							
Personal protective equipment:							
General protective and hygienic measures	Usual hygienic measures for dental practice and dental laboratories. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove contaminated clothing and wash before reuse. Store protective clothing separately. Avoid contact with the eyes and skin. Do not inhale gases / fumes / aerosols.						
Respiratory protection	In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.						
Recommended filter device for short term use	Combination filter E-P2 / Combination filter B-P2.						
Protection of hands	 <p>Protective gloves</p> <p>After use of gloves apply skin-cleaning agents and skin cosmetics.</p>						

Material of gloves:	Butyl rubber, BR / Fluorocarbon rubber (Viton) / Chloroprene rubber, CR / PVC gloves. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Penetration time of glove material	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	 Tightly sealed goggles
Body protection	Protective work clothing

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties:

General Information:

Appearance:

Form	Viscous
Colour	Red
Odour	Pungent
Odour threshold	Not determined
pH-value at 20°C	2
Change in condition:	
Melting point/Melting range	Not applicable
Boiling point/Boiling range	Undetermined
Flash point	Not applicable
Self-igniting	Product is not self igniting
Danger of explosion	Product does not present an explosion hazard
Explosion limits:	
Lower	Not determined
Upper	Not determined
Vapour pressure	Not determined
Density at 20 °C	1.13 g/cm ³
Relative density	Not determined
Vapour density	Not determined
Evaporation rate	Not determined
Solubility in/Miscibility with water	Fully miscible
Partition coefficient (n-octanol/water)	Not determined
Viscosity:	
Dynamic	Not determined
Kinematic	Not determined
Other information	No further relevant information available

Section 10: Stability and Reactivity

Reactivity	No further relevant information available.
Chemical stability	Stable under normal handling and storage conditions.

Thermal decomposition / conditions to be avoided	No decomposition if used according to specifications.
Possibility of hazardous reactions	Reacts with: Ammonia / Sulphuric acid / Reacts with alkali (lyes). Reacts with organic substances. Reacts with metals forming hydrogen.
Conditions to avoid	Keep away from heat and direct sunlight.
Incompatible materials	Attacks materials containing glass and silicate.
Hazardous decomposition products	None under normal conditions of storage and use.

Section 11: Toxicological Information

Information on toxicological effects:	
Acute toxicity:	Toxic if swallowed. Fatal in contact with skin. Harmful if inhaled.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/irritation	Causes serious eye damage.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

Section 12: Ecological Information

Toxicity:	
Aquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available.
Bio accumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes	Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized.
Results of PBT and vPvB assessment:	
PBT	Not applicable.
vPvB	Not applicable.
Other adverse effects	No further relevant information available.

Section 13: Disposal Considerations

Waste treatment methods:							
Recommendation	Neutralize of the etching gel! (see instructions for use). To neutralize the diluted solution, add neutralizing powder and wait for 5 minutes. After 5 minutes, dispose of the neutralized solution under running water. Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority						
<table border="1"> <tr> <th colspan="2">European waste catalogue</th> </tr> <tr> <td>18 01 06</td> <td>chemicals consisting of or containing dangerous substances</td> </tr> <tr> <td>20 01 14</td> <td>acids</td> </tr> </table>		European waste catalogue		18 01 06	chemicals consisting of or containing dangerous substances	20 01 14	acids
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Uncleaned packaging:							
Recommendation	Disposal must be made according to official regulations.						

Section 14: Transport Information

UN Number	1790
DG Proper shipping name	Hydrofluoric Acid
DG Class and subsidiary risk	Class 8 Corrosive
Packing group	II
Hazchem code	2[X]E
Dangerous Goods Segregation	This product is classified as Dangerous Goods Class 8, packing group II. Please consult NZS 5433 Safe Transport of Dangerous Goods for more information.

**Corrosive****Section 15: Regulatory Information**

EPA Approval Code HSR001589

HSNO Controls:

Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	Not applicable
Location Certificate	Not applicable
Tracking Trigger Quantities	Not applicable
Signage Trigger Quantities	1,000 L (liquid) / kg (solid)
Emergency Response Plan Trigger Quantities	100 L (liquid) / kg (solid)

Section 16: Other Information

Relevant phrases:	H300	Fatal if swallowed.
	H310	Fatal in contact with skin.
	H314	Causes severe skin burns and eye damage.
	H330	Fatal if inhaled.

This document has been compiled by Ivoclar Vivadent Ltd on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to Ivoclar Vivadent (NZ) Ltd by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While Ivoclar Vivadent (NZ) Ltd has taken all care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Ivoclar Vivadent (NZ) Ltd accepts no liability or any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS. The information herein is given in good faith, but no warranty, express or implied is made.

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