

Material Safety Data Sheet

according to NOHSC:2011(2003)



Product name : Ivoclar Vivadent Total Etch
Statement of Hazardous Nature : This product is classified as: Hazardous according to criteria of National Occupational Health and Safety Commission.
Revision : 11.12.2013 **Version :** 1.0.1
Print date : 11.12.2013

01. Identification of substances, preparation and company

Product name: Ivoclar Vivadent Total Etch
Use of the substance / preparation: Etching Gel
Manufacturer / Supplier: Ivoclar Vivadent AG
Street / P O Box: Benderstrasse 2
Country code / Postal Code / Town / City: FL-9494 Schaan
Principality of Liechtenstein
Telephone: + 423 235 35 35
Telefax: + 423 235 33 60
Distributor: Ivoclar Vivadent Pty Ltd
1 – 5 Overseas Drive
Noble Park North VIC 3174
Australia
Telephone: + 61 3 9795 9599
Telefax: + 61 3 9795 9645
Emergency information: Poisons Information Centre: Dial 13 11 26
24 hours a day, 7 days a week – Australia wide

02. Hazards identification

Statement of Hazardous Nature
This product is classified as Hazardous according to criteria of National Occupational Health and Safety Commission.

Hazard designation
Classification: ADG6: C1



Corrosive

ADG Classification: Class 8
UN Number: 1805

Particular information pertaining specific risk for human and environment

Dangerous component / Risk phrases:

Risk phrases:

34 Causes burns.
35 Causes severe burns.

Safety phrases:

2 Keep out of reach of children.
20 When using do not eat or drink.
23 Do not breathe aerosol,
24/25 Avoid contact with skin and eyes.
26 In case of contact with eyes - flush with plenty of water (10 – 15 minutes) and seek medical assistance immediately.
28 Flush with plenty of water. Wash thoroughly with soap and water. If burns occur, treat as any thermal burn and seek medical assistance.
36/37/39 Sample shipments not allowed by air mail.
45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
60 The material and its container must be disposed of as hazardous waste.

Particular information pertaining specific risk for human and environment

Direct contact can cause eye and skin irritation. The material is contra-indicated if a person is known to be allergic to any of the ingredients of this product.

03. Composition / information on ingredients

Chemical characterisation

Phosphoric acid

Hazardous components

CAS: 7664-38-2 EINECS: 231-633-2
37% (25-50%) phosphoric acid solution in water.

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Other ingredients determined not to be hazardous

None

Dangerous component / Risk phrases:

Risk phrases:

- 34 Causes burns.
- 35 Causes severe burns.

Safety phrases:

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04. First-aid measures

General

Immediately remove all contaminated clothing. Irrigate with flowing water immediately and continuously for 15 minutes. Seek medical assistance.

After inhalation

Let in fresh air. Should the air passages be effected or respiratory irritation is experienced seek medical assistance.

After skin contact

Flush with plenty of water. Wash thoroughly with soap and water. If burns occur, treat as any thermal burn and seek medical assistance.

After eye contact

Flush with plenty of water (10 – 15 minutes) and seek medical assistance immediately.

After ingestion

Rinse out mouth and drink plenty of water. Do not induce vomiting. Seek medical assistance immediately.

05. Fire-fighting measures

Suitable extinguishing media

This product is not flammable.
Use fire extinguisher methods suitable to surrounding conditions.

Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

Formation of toxic gases is possible during heating or in case of fire.

Special protective equipment

No special measures required. When extinguishing fires, use breathing apparatus with an independent source of air.

06. Accidental release measures

Personal precautions

Wear suitable protective clothing, gloves and eye / face protection.

Environmental precautions

Prevent from flowing into sewers, surface water / ground water.

Methods for cleaning up / collecting

Take up with a mechanical source and proceed according to the waste disposal regulations.

Dilute with plenty of water.

Use neutralising agent.

Absorb with liquid-binding material (sand, diatomite, acid barriers, universal binders, sawdust).

Additional information

Remove according to regulations. Cool containers in the vicinity of the blaze using a water spray. Clean up with absorbent material. Prevent skin and eye contact. Clean area with large amounts of water.

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07. Handling and storage

Information for safe handling

Containers to be opened and handled with care. Make sure that ventilation is adequate. Only adequately trained personnel should handle this product. Keep out of reach of children. When using – do not eat, drink or smoke.

Information about protection against explosions and fires

No anti-explosions measures necessary.

Requirements to be met by storerooms and containers

Keep only in the original container. Store at 2 – 28°C / 36-82°F. Do not store in open sunshine. Keep away from heat source. Avoid exposure to light.

Information about separation of incompatible products

Store foodstuffs separately.

08. Exposure controls and personal protection

Additional information about engineering measures

No particular measures required. Technical measures – provide adequate local ventilation. Control airborne concentration below the exposure guideline.

Components with critical values that require monitoring at the workplace (exposure limits)

MAK-Value = TLV (USA): 1 mg/m³

Specifications: TWA (AUS)

Value: MAK 1mg/m³

Ingredients with limit values that require monitoring at the workplace:

7664-38-2 phosphoric acid

WEL () Short-term value: 2 mg/m³

Long term value: 1 mg/m³

Personal protective equipment

Do not eat or drink during work. No smoking. Keep away from food, drink and animal feeding stuff. Avoid contact with skin and eyes. Respiratory protection.

Respiratory protection

Provide for good ventilation.

Hand protection

Short-term exposure (< 30mins): disposable gloves, eg: nitrile rubber, material thickness 0.1mm (Australian Standard 2161). Long-term exposure (Level 6: < 480min): protective gloves, eg: nitrile rubber, material thickness 0.7mm (Australian Standard 2161).

Eye protection

Use tightly fitting safety glasses (Australian Standard AS 1336 and AS/NZS 1337).

Body protection

General protective and hygiene measures:

Usual hygienic measures for dental practice.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

Not required.

Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Natural rubber, NR

Chloroprene rubber, CR

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.

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09. Physical and chemical properties

Image

Form: Liquid/gel
Colour: Blue
Odour: Practically odourless

Relevant safety data

Melting point/range:	(1013 hPa)	ca.	n/a	°C	DIN 51755
Casting point/range:	(1013 hPa)		n/a	°C	
Flash point:			n/a	°C	
Ignition temperature:			n/a	°C	
Lower explosion limit:			n/a	% b.v.	
Upper explosion limit:			n/a	% b.v.	
Density:	(20°C)		1.29	g/cm ³	
Solubility in water:	(20°C)		soluble	% b.w.	
pH value:			< 1		

10. Stability and reactivity

Conditions to avoid

No further relevant information available.

Materials to avoid

No further relevant information available.

Hazardous decomposition products

None under normal conditions of storage and use.

11. Toxicological information

Toxicological tests

Acute toxicity.

LD/LC50 values relevant for classification: 7664-38-2 phosphoric acid. Oral / LD50 / 1530 mg/kg (rat).

Primary irritant effect

On skin: Caustic effect on skin and mucous membranes.

On the eye: strong caustic effects.

Sensitisation

No sensitising effects known.

Experience on practice

Corrosive.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

12. Ecological information

Toxic - No ecological problems to be anticipated if properly handled and used, nearly insoluble.

Details on elimination (persistence / degradability)

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 un-neutralised. Rinse with large volume of water.

Abiotoxic elimination

No data available.

Biological degradation / elimination

No data available.

Fate in environmental compartments

There is no data available on the preparation itself.

Ecotoxicological effects

Performance in sewage/treatment plants

Must not reach sewage water or drainage ditch undiluted or un-neutralised. Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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13. Disposal consideration

Product

Concentrate: the cleaned-up material must be disposed of in accordance with Federal, State or Local regulations.

Contaminated packaging

Contaminated packaging must be emptied of all residues and following appropriate cleaning may be sent to a recycling plant. Uncleaned packaging must be disposed of in the same manner as the medium. Must not be disposed together with household garbage. Do not allow product to reach sewage system.

14. Transport information

Land transport ADG

Classification: ADG6:C1



Corrosive – R34 causes burns

ADR/RID:	8 (C1) Corrosive substances
Danger code (Kemler)	80
UN Number:	1805
Packing Group:	III
Hazard Label:	8
Tunnel restriction code:	E
LQ:	19
UN proper shipping name:	1805 PHOSPHORIC ACID, SOLUTION, mixture.

Maritime transport IMDG

Classification: ADG6:C1



Corrosive – R34 causes burns

IMDG:	8
UN Number:	1805
Packing Group:	III
Hazard Label:	8
EMS Number:	F-A, S-B
Segregation group:	Acids.
UN proper shipping name:	1805 PHOSPHORIC ACID, SOLUTION, mixture.

Air transport ICAO-TI and IATA-DGR

Classification: ADG6:C1



Corrosive – R34 causes burns

ICAO/IATA Class:	8
UN Number:	1805
Packing Group:	III
Hazard Label:	8
UN proper shipping name:	1805 PHOSPHORIC ACID, SOLUTION, mixture.

Passenger airplane maximum packing instruction 5L 821 Air Cargo Maximum, 60 L. Sample shipments not allowed by air mail.

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15. Regulatory information

Classification

Danger symbol and danger designation



C: Corrosive Phosphoric Acid, solution in water.

Hazard-determining components of labelling

None: MAK value 0.1mg/m³ ml/m (ppm)

R-phases

- 34 Causes burns.
- 35 Causes severe burns.

S-phrases

- 2 Keep out of reach of children.
- 20 When using do not eat or drink.
- 23 Do not breathe aerosol,
- 24/25 Avoid contact with skin and eyes.
- 26 In case of contact with eyes - flush with plenty of water (10 – 15 minutes) and seek medical assistance immediately.
- 28 Flush with plenty of water. Wash thoroughly with soap and water. If burns occur, treat as any thermal burn and seek medical assistance.
- 36/37/39 Sample shipments not allowed by air mail.
- 45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
- 60 The material and its container must be disposed of as hazardous waste.

16. Other information

Processing instructions / technical data sheets

Please observe the label / directions for use.

Further information

Important Note: The above-mentioned data correspond to our present state of knowledge and experience as of the date noted and are for use only as a guide in connection with occupational health and safety. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not have the meaning of guarantees on the properties of the product.

We make no representation, guarantee or warranty, express or implied, as to the accuracy, reliability or completeness of the information and assume no responsibility for injury damage or loss resulting from the use of the material.

Legend: CAS No. Chemical Abstracts Service Registry Number

This is a medical device classified under the requirement of EU and TGA. Complies with ISO 8891 and ISO 9693.

Contact

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Tel: + 61 3 9795 9599

This data is based on our present knowledge; however, this shall not constitute a guarantee for any specific product features and shall not establish a legally contractual relationship.