

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name. : Etchant Gel - Dark Blue
Product code : S-Chem-390
Product group : Commercial product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/preparation : For Professional Dental Use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

DE Healthcare Products
Gillingham ME8 0SB UK

UK 01634878750
Emergency #: Chemtrec US (800) 424-9300
International: 001 703-527-3887
Fax +44 (0) 1634 87 87 51
email: info@dehpbrand.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

GHS/CLP classification

Skin Corr. 1B H314
Eye Dam. 1 H318

Full text of R and H-phrases: see section 16

2.2. Label elements

GHS/CLP labelling

Hazard pictograms (GHS/CLP) :



GHS05

GHS08

Signal word (GHS/CLP) : Danger

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Hazard statements (GHS/CLP)	: H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage
Precautionary statements (GHS/CLP)	: P260 - Do not breathe vapours, fume, dust P264 - Wash hands and forearms thoroughly after handling P280 - Wear eye protection, protective gloves P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting 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 person to fresh air and keep 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 P310 - Immediately call a POISON CENTER/doctor P405 - Store locked up P501 - Dispose of contents/container according to local, regional, national, and international regulations

Adverse physicochemical, human health and environmental effects

No additional information available

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
85% Phosphoric acid	(CAS No.) 7664-38-2 (EC No.) 231-633-2 (EC Index No.) 015-011-00-6	45 - 55	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318
Silica, amorphous, fumed, crystalline-free substance with national workplace exposure limit(s) (AT)	(CAS No.) 112945-52-5 (EC No.) 601-216-3	5 - 15	Not classified
C.I. Pigment Blue 28	(CAS No.) 1345-16-0 (EC No.) 310-193-6	0.1 - 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1B, H334 Skin Sens. 1B, H317 STOT SE 3, H335

Name	Product identifier	Specific concentration limits
Phosphoric acid	(CAS No.) 7664-38-2 (EC No.) 231-633-2 (EC Index No.) 015-011-00-6	(25 =< C) Skin Corr. 1B, H314 (10 =< C < 25) Skin Irrit. 2, H315 (10 =< C < 25) Eye Irrit. 2, H319

Full text of R-, H- and EUH-phrases: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If medical advice is needed, have product container or label at hand.
- First-aid measures after inhalation : If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.
- First-aid measures after skin contact : Immediately rinse with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Obtain medical attention if irritation persists.
- First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention.
- First-aid measures after ingestion : If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Corrosive. Causes burns. Causes skin irritation. Causes eye irritation.
- Symptoms/injuries after inhalation : Difficulty in breathing. Cough. Dry/sore throat.
- Symptoms/injuries after skin contact : Prolonged skin contact may result in severe irritation progressing to chemical burns.
- Symptoms/injuries after eye contact : May cause severe irritation.
- Symptoms/injuries after ingestion : Abdominal pain. Nausea.

4.3. Indication of any immediate medical attention and special treatment needed

If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Not considered flammable but will burn at high temperatures. Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : If involved in a fire the following toxic and/or corrosive fumes may be produced by thermal decomposition : Oxides of phosphorus.
- Explosion hazard : Product is not explosive.
- Reactivity : Stable at ambient temperature and under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Do not breathe fumes from fires or vapours from decomposition. All fire-fighting personnel must wear safety suits.
- Protection during firefighting : Use normal individual fire protective equipment. Use self-contained breathing apparatus when fighting fire in an enclosed area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Do not get in eyes, on skin, or on clothing.

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6.1.1. For non-emergency personnel

- Protective equipment : During cleaning/processing wear suitable respiratory equipment. Wear suitable protective clothing, gloves and eye/face protection.
- Emergency procedures : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Evacuate unnecessary personnel. Ventilate area.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Collect absorbed material and place into a sealed, labelled container for proper disposal.
- Emergency procedures : Ventilate area. Evacuate unnecessary personnel.

6.2. Environmental precautions

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.3. Methods and material for containment and cleaning up

- For containment : Absorb and/or contain spill with inert material, then place in suitable container.
- Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid contact with skin and eyes.
- Precautions for safe handling : Avoid all eyes and skin contact and do not breathe vapour and mist. Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Ensure there is adequate ventilation. Wear recommended personal protective equipment.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Do not eat, drink or smoke in areas where product is used.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in original container. Store in a dry, cool place. Store in a well-ventilated place. Keep container tightly closed.
- Storage area : Store away from heat.
- Special rules on packaging : Keep container closed when not in use.

7.3. Specific end use(s)

For Professional Dental Use

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phosphoric acid (7664-38-2)		
EU	IOELV TWA (mg/m ³)	1 mg/m ³

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Phosphoric acid (7664-38-2)		
EU	IOELV STEL (mg/m ³)	2 mg/m ³
France	VLE (mg/m ³)	2 mg/m ³ (indicative limit)
France	VLE (ppm)	0.5 ppm (indicative limit)
France	VME (mg/m ³)	1 mg/m ³ (indicative limit)
France	VME (ppm)	0.2 ppm (indicative limit)
USA IDLH	US IDLH (mg/m ³)	1000 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	3 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	1 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

Silica, amorphous, fumed, crystalline-free (112945-52-5)		
Austria	MAK (mg/m ³)	4 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Protective goggles. Gloves.

Insufficient ventilation: wear respiratory protection.



Materials for protective clothing : Butyl-rubber protective gloves.

Hand protection : Impermeable protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Handle in accordance with good industrial hygiene and safety practice. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Wear suitable protective clothing. Wash contaminated clothing before reuse. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls : Ensure adequate ventilation, especially in confined areas.

Consumer exposure controls : Wear recommended personal protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Dark gel

Colour : Blue

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Odour	: No data available
Odour threshold	: No data available
pH	: < 1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: > 1 g/cc
Solubility	: Water: Soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at ambient temperature and under normal conditions of use.

10.2. Chemical stability

Stable at standard temperature and pressure.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under conditions of fire this material may produce: Oxides of phosphorus.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Phosphoric acid (7664-38-2)	
LD50 oral rat	1530 mg/kg
LD50 dermal rabbit	2730 mg/kg
LC50 inhalation rat (mg/l)	> 850 mg/m ³ (Exposure time: 1 h)

Silica, amorphous, fumed, crystalline-free (112945-52-5)	
LD50 oral rat	3160 mg/kg

Irritation	: Causes serious eye damage. pH: < 1
Corrosivity	: Causes severe skin burns and eye damage. pH: < 1
Sensitisation	: Not classified
Repeated dose toxicity	: Not classified
Carcinogenicity	: Not classified
Mutagenicity	: Not classified
Toxicity for reproduction	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Phosphoric acid (7664-38-2)	
LC50 fish 1	3 - 3.5 mg/l (Exposure time: 96 h - Species: Gambusia affinis)
EC50 Daphnia 1	4.6 mg/l (Exposure time: 12 h - Species: Daphnia magna)

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No. : 1805

14.2. UN proper shipping name

Proper Shipping Name : Phosphoric Acid Solution

Transport document description : UN 1805, 8, III, (E)

14.3. Transport hazard class(es)

Class (UN) : 8

Hazard labels (UN) : 8



14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 80

Classification code (UN) : C1

Orange plates :



Transport category (ADR) : 3

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Tunnel restriction code : E
Limited quantities (ADR) 5L
Excepted quantities (ADR) : E1
EAC code : 2R

14.6.2. Transport by sea

MFAG-No. : 154

14.6.3. Air transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

This substance is a medical product, and as such, is exempt from REACH registration requirements.

15.1.2. National regulations

Phosphoric acid (7664-38-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

16.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

C; R34

Adverse physicochemical, human health and environmental effects

No additional information available

16.2. Label elements

Labelling according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols :



C - Corrosive

R-phrases : R34 - Causes burns.

Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1

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Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Resp. Sens. 1B	Respiratory sensitisation Category 1B
Skin Corr. 1B	skin corrosion/irritation Category 1B
Skin Irrit. 2	skin corrosion/irritation Category 2
Skin Sens. 1B	Skin sensitisation Category 1B
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
R34	Causes burns.
R36/37/38	Irritating to eyes, respiratory system and skin.
R42	May cause sensitization by inhalation.
R43	May cause sensitisation by skin contact.
C	Corrosive
Xi	Irritant
Xn	Harmful

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.