Safety Data Sheet
According to 1907/2006/EC, Article 31

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

1.1 Product identifier

Trade name: Solaetch Etching-Gel

Article number:3005051

1.2 Relevant identified uses of the substance or mixture and uses advised against
Dental etching agent for professional use in restorative dental procedures.
Application of the substance / the mixture Etchant

1.3 Details of the supplier of the safety data sheet
Manufacturer /supplier:
Unit 3C, 88 Peterborough Road, London SW6 3HH, United Kingdom
Tel: +44 20 3689 9046 www.trentdent.co.uk E-mail: info@trentdent.co.uk
Further information obtainable from: R&D, Trent Dent Products Limited, Tel:+44 20 3689 9046
1.4 Emergency telephone number
Tel:+44 20 3689 9046, Trent Dent Products Limited (9:00 - 17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labelling:
Phosphoric acid
Hazard statements
H314 Causes severe skin burns and eye damage.

Precautionary statements

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

Labelling of packages where the contents do not exceed 125 ml

Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labelling:

Phosphoric acid

Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

phosphoric acid gel 37, 5 %

Description:

Dental etching gel based on phosphoric acid, used for surface conditioning of tooth enamel and dentin.

Dangerous components:		
CAS: 7664-38-2 EINECS: 231-633-2	Phosphoric acid Skin Corr. 1B, H314 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 %	25-50%

	Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	

Additional information for the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information immediately remove any clothing soiled by the product.
After inhalation Supply fresh air; consult doctor in case of complaints.
After skin contact
Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment.
After eye contact Rinse opened eye for several minutes under running water. Remove contact lenses if present and easy to do. If symptoms persist, Then consult a doctor.
After swallowing
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed
Immediate medical attention is required in case of exposure.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents Use fire extinguishing methods suitable to surrounding conditions such as foam, co2 and dry powder,etc.
5.2 Special hazards arising from the substance or mixture
Vapours of toxic phosphor oxides are developed during thermal decomposition.
During heating or in case of fire poisonous gases are produced.
5.3 Advice for fire-fighters
Protective equipment:
Acid-resisting clothing
Wear self-contained respiratory protective device.
Mount respiratory protective device.
Additional information
Collect contaminated firefighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid eye and skin contact with the substance.
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
6.4 Reference to other sections

See Section 7 for information on handling and storage.
See Section 8 for information on exposure controls/personal protection.
See Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Avoid contact with eyes and skin.
- Use appropriate PPE (gloves, eye protection) when handling.
- Ensure good ventilation in the work area.

Keep receptacles tightly sealed.
Open and handle receptacle with care.
Information about fire - and explosion protection: The product is not flammable

7.2 Conditions for safe storage, including any incompatibilities
StorageRequirements to be met by storerooms and receptacles:
Do not use light alloy receptacles.
Storage between 10 °C and 25 °C.
Information about storage in one common storage facility:
Do not store together with alkalis (caustic solutions).
Store away from oxidizing agents.
Further information about storage conditions:
Store in cool, dry conditions in well-sealed receptacles.
Store receptacle in a well-ventilated area.
Protect from frost.
7.3 Specific end use(s)
Professional dental uses only**.**

SECTION 8: Exposure controls/Personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
7664-38-2 phosphoric acid	
OEL (Ireland)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
WEL (Great Britain)	IOELV Short-term value: 2 mg/m³ Long-term value: 1 mg/m³
PEL (USA)	Long-term value: 1 mg/m³
REL (USA)	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³
TLV (USA)	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³
IOELV (European Union)	Short-term value: 2 mg/m³ Long-term value: 1 mg/m³

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Appropriate engineering controls No further data; see section 7.
Individual protection measures, such as personal protective equipment
General protective and hygienic measures
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Respiratory protection: Not required.
Hand protection Acid resistant gloves
Material of gloves
PVC gloves
Nitrile rubber, NBR
Neoprene gloves
Penetration time of glove material
0,3 mm
Penetration time 60 min.
0,11 mm
Penetration time 10 min.
Eye/face protection Tightly sealed goggles.
Body protection: Acid resistant protective clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties **General Information**	
Physical state	Gel or Thickened Fluid
Colour:	According to product specification
Odour:	Undistinguishable
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined
Boiling point or initial boiling point and boiling range	Undetermined
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable
Auto-ignition temperature	400°C (68611-44-9 Siliciumdioxide synthetisches röntgenamorphes)
Decomposition temperature:	Not determined.
pH at 20 °C	1.6
Viscosity:	

Kinematic viscosity	Not determined.
dynamic at 20 °C:	4,000 mPas
Solubility	
Water:	Not miscible or difficult to mix
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure at 20 °C:	23hPa(7732-18-5 water, distilled, conductivity or of similarpurity)
Density and/or relative density	
Density at 20 °C:	1.3g/cm^3
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information **Appearance**:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	0.0 %
Change in condition	
Evaporation rate	Not determined.

Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity Strong acid. Incompatible materials: some metals, etc.
10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions
Heating occurs when water is added
Reacts with alkali (lyes)
Reacts with various metals
10.4 Conditions to avoid
- Exposure to extreme heat or open flame.
- Prolonged exposure to moisture or high humidity.
- Incompatible materials (strong bases, oxidizing agents).
- Direct exposure to sunlight.**10.5 Incompatible materials:** No further relevant information available.
10.6 Hazardous decomposition products:
- Phosphorus oxides (P2O5) may form when heated to decomposition.
- Toxic fumes may be released in a fire.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
Skin corrosion/irritation Causes severe skin burns and eye damage.
- Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Serious eye damage/irritation Causes serious eye damage.
- Eye Irrit. 2; H319 (Causes serious eye irritation).
Respiratory or skin sensitization Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
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.
11.2 Information disrupting properties

Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumutlative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects
Additional ecological information:
General notes:
Water hazard class 1(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 unneutralised.
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organism. 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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation:
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Uncleaned packaging:
Recommendation:
Empty contaminated packaging thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

14.1 UN-Number **ADR, IMDG, IATA**	 UN1805

14.2 UN proper shipping name **ADR** **IMDG, IATA**	 1805 PHOSPHORIC ACID, SOLUTION PHOSPHORIC ACID, SOLUTION
14.3 Transport hazard class(es) **ADR**  **Class** **Label**	 8 (C1) Corrosive substances 8
IMDG, IATA  **Class** **Label**	 8 Corrosive substances 8
14.4 Packing group **ADR, IMDG, IATA**	 III
14.5 Environmental hazards:	

Marine pollutant:	No
14.6 Special precautions for user **Hazard identification number (Kemler code):** **EMS Number:** **Segregation groups** **Stowage Category** **Segregation Code**	Warning: Corrosive substances 80 F-A,S-B (SGG1) Acids A SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
14.7 Maritime transport in bulk according to IMO instruments	Not applicable
Transport/Additional information:	
ADR **Limited quantities (LQ)**	5L
Excepted quantities (EQ) **Transport category** **Tunnel restriction code**	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 E
IMDG **Limited quantities (LQ)** **Excepted quantities (EQ)**	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation"	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

SECTION 15: Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.
Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.

National regulations

Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

Relevant phrases
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Department issuing SDS: R&D, TRENT DENT PRODUCTS LTD
Date of previous version: Dec 2024
Version number of previous version: 02
Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Eye Dam. 1: Serious eye damage/eye irritation – Category 1