## This SDS packet was issued with item:

077640089

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

077340425 077640147 077640154 077640162 077640188

according to Regulation (EC) No. 453/2010

Dental Use



**Date Issued:** 09/06/2012

**SDS No:** 7-001.13 **Date Revised:** 03/18/2015

**Revision No:** 14

#### **Ultra-Etch®**

#### SECTION 1: Identification of the substance/preparation and of the company/undertaking

#### 1.1. Product identifier

Product code : UX/10947
Product name : Ultra-Etch®

**Product description**: Phosphoric Acid dental etchant

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

**Relevant identified uses**: Professional Dental Acid Etching Solution

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Ultradent Products, Inc. 505 W. 10200 S.

South Jordan, UT 84095

#### **Distributor**

Ultradent Products GmbH Am Westhover Berg 30 51149 Cologne Germany Email: infoDE@ultradent.com

**Emergency Phone:** +49(0)2203-35-92-0

#### 1.4. Emergency telephone number

**CHEMTREC (NORTH AMERICA) :**(800) 424 - 9300

(INTERNATIONAL) :+1(703) 527 - 3887

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification according to Directive 1999/45/EC

: The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Danger symbols : C
R phrases : R34

### Classification according to Regulation (EC) No 1272/2008 [CLP]

**Health** : Skin Corrosion, Category 1B

#### 2.2. Label elements

This mixture contains Phosphoric Acid. This material is considered hazardous as defined by the OSHA Hazard Communication Standard (29 CFR 1819.1200)

#### Classification according to Directive 1999/45/EC

Hazard pictogram(s) : C



Corrosiv

**R&S statement(s)** : R34: Causes burns.

according to Regulation (EC) No. 453/2010
Dental Use



**Date Issued :** 09/06/2012

**SDS No:** 7-001.13 **Date Revised:** 03/18/2015

**Revision No:** 14

## **Ultra-Etch®**

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictogram(s)

Corrosive

Signal Word : WARNING

**Hazard statement(s)** : H314: Causes severe skin burns and eye damage.

**Precautionary statement(s)** 

**Prevention**: P280: Wear protective gloves/protective clothing/eye protection/face

protection.

**Response** : P305+P351+P338: IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P302+P352: IF ON SKIN: Wash with plenty of soap and water. P332+P313: If skin irritation occurs: Get medical advice/attention.

P301: IF SWALLOWED:

P310: Immediately call a POISON CENTER or doctor/physician.

P331: Do NOT induce vomiting.

**Storage** : P273: Avoid release to the environment.

**Disposal**: P501: Dispose of in compliance with governmental regulation. (EC

1975L0442-20/11/2003)

2.3. Other hazards

**Immediate concerns** : Corrosive. Will cause eye burns and permanent tissue damage.

#### **SECTION 3: Composition / information on ingredients**

#### 3.1. Substances

Not Applicable

### 3.2. Mixtures

Chemical Name	CAS	EINECS No.	Wt.%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No 1272/2008 [CLP]
Phosphoric Acid	7664-38-2	231-633-2	< 45	C; R34	Skin Corr.,Cat. 1B; H314

For full text of H-statements and R-phrases: see SECTION 16.

#### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

according to Regulation (EC) No. 453/2010
Dental Use



**Date Issued :** 09/06/2012 **SDS No :** 7-001.13

**Date Revised:** 03/18/2015

**Revision No:** 14

## **Ultra-Etch®**

**Following eyes**: Immediately flush with plenty of water. After initial flushing, remove

any contact lenses and continue flushing for at least 15 minutes. Have

eyes examined and tested by medical personnel.

**Following skin**: Wash with soap and water. Get medical attention if irritation develops

or persists.

**Following ingestion**: If swallowed, rinse mouth with water, Do NOT Induce Vomiting. Give

victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious

person.

**Following inhalation**: No specific treatment is necessary since this material is not likely to be

hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other

symptoms develop.

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

**Eyes** : Causes severe eye burns.

**Skin** : Corrosive, causes skin burning.

**Ingestion**: Harmful if swallowed.

**Inhalation**: None expected for this product.

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

Notes to physician : Corrosive

#### **SECTION 5: Fire fighting measures**

#### 5.1. Extinguishing media

**Extinguishing media** : Please see Fire Fighting Equipment under Section 5.3.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Not Determined
Explosion hazards: Not Determined
Fire explosion: Not Determined
Sensitive to static discharge: Not Determined
Sensitivity to impact: Not Determined

#### **5.3.** Advice for firefighters

**Fire fighting procedures** : General: Evacuate all personnel; use protective equipment for fire-

fighting. Use self-contained breathing apparatus when the product is

involved in fire.

**Fire fighting equipment**: Non-combustible.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

**General procedures**: Refer to Section 8 for Personal Protective Equipment.

#### 6.2. Environmental precautions

according to Regulation (EC) No. 453/2010

Dental Use



**Date Issued :** 09/06/2012 **SDS No :** 7-001.13

**Date Revised:** 03/18/2015

Revision No: 14

#### Ultra-Etch®

**Water spill**: Do not allow to enter sewers or drains that may lead to waterways.

6.3. Methods and material for containment and cleaning up

**Small spill** : Clean up spills immediately, observing precautions in Protective

Equipment section.

Large spill : Absorb with inert, damp non-combustible material, then flush area

with water.

6.4. Reference to other sections

**Reference to other sections**: Not Applicable

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

**General procedures**: Avoid contact with eyes, skin and clothing.

**Handling** : Use suitable protective equipment.

**Storage**: See product labeling.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Shelf life** : See product labeling

7.3. Specific end use(s)

**Specific end use(s)**: Professional Dental Acid Etching Solution

#### **SECTION 8: Exposure controls / personal protection**

#### 8.1. Control parameters

**Control parameters** : Not Determined

#### 8.2. Exposure controls

**Eye/face protection**: Wear eye protection

**Skin protection**: Wear suitable protective clothing and gloves.

**Respiratory protection** : Good general ventilation should be sufficient to control airborne levels.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Gel
Colour : Blue

**Odour** : Odorless or no characteristic odor

**pH** : < 1

**Solubility in water**: Partially soluble in water.

9.2. Other information

Percent volatile : Not Determined

#### **SECTION 10: Stability and reactivity**

according to Regulation (EC) No. 453/2010
Dental Use



**Date Issued :** 09/06/2012 **SDS No :** 7-001.13

**Date Revised:** 03/18/2015

**Revision No:** 14

#### **Ultra-Etch®**

10.1. Reactivity

**Reactivity** : Stable

10.2. Chemical stability

**Chemical stability** : Stable when stored and handled under recommended conditions.

10.3. Possibility of hazardous reactions

**Hazardous polymerization**: None

10.4. Conditions to avoid

**Conditions to avoid** : Avoid strong bases, Metals. Excess heat, exposure to moist air or

water.

**10.5.** Incompatible materials

**Incompatible materials**: Strong caustics, most metals.

10.6. Hazardous decomposition products

Hazardous decomposition

products

: Phosphine, oxides of phosphorous, hydrogen gas

**Additional information**: Reacts with bases to form phosphate salts and is corrosive (especially

when hot) to many metals and alloys. Liberates explosive hydrogen gas when reacting with chlorides and stainless steel, and reacts violently with sodium tetrahydroborate. Forms flammable gases with sulfides, mercaptans, cyanides, and aldehydes. Also forms toxic fumes with cyanides, sulfides, fluorides, organic peroxides, and halogenated

organics.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute

**Notes**: Device is a strong acid and is extremely toxic. It is to be used only as

directed with PPE, and only by licensed dental professionals.

#### **SECTION 12: Ecological information**

12.1. Toxicity

**Toxicity** : Not Determined

**Aquatic toxicity (acute)** 

96-hour LC<sub>50</sub> : Not Determined
48-hour EC<sub>50</sub> : Not Determined
96-hour EC<sub>50</sub> : Not Determined

12.2. Persistence and degradability

Persistence and degradability : Not Determined

12.3. Bioaccumulative potential

Bioaccumulative potential : Not Determined

according to Regulation (EC) No. 453/2010
Dental Use



**Date Issued :** 09/06/2012 **SDS No :** 7-001.13

**Date Revised:** 03/18/2015

**Revision No:** 14

#### **Ultra-Etch®**

12.4. Mobility in soil

**Mobility in soil** : Not Determined

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

assessment

: Not Determined

12.6. Other adverse effects

**Environmental data** : Not defined

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**Disposal method**: Dispose of in compliance with governmental regulation. (EC

1975L0442-20/11/2003)

#### **SECTION 14: Transport information**

**14.1. UN** number

UN number : 1760

14.2. UN proper shipping name

**UN proper shipping name** : Corrosive liquid, n.o.s. (Phosphoric acid mixture)

14.3. Transport hazard class(es)

Primary hazard class/division : 8
Hazard classification : 8

14.4. Packing group

Packing group : III

14.5. Environmental hazards

Marine pollutant #1 : N/A

14.6. Special precautions for user

ADR - road : N/A
RID - rail : N/A
IMDG - sea : N/A
IATA - air : N/A

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

**Transport in bulk**: N/A

#### **SECTION 15: Regulatory information**

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

**RoHS**: Please refer to Medical Devices Directive 93/42/EEC

15.2. Chemical safety assessment

**Chemical safety assessment**: See Section 11

according to Regulation (EC) No. 453/2010
Dental Use



**Date Issued :** 09/06/2012 **SDS No :** 7-001.13

**Date Revised :** 03/18/2015

**Revision No:** 14

#### **Ultra-Etch®**

#### **SECTION 16: Other information**

Relevant R-phrases and/or Hstatements (number and full

text)

Prepared by

**Revision summary** 

General statements

Manufacturer disclaimer

: R34: Causes burns.

Skin Corr., Cat. 1B: Skin Corrosion, Category 1B H314: Causes severe skin burns and eye damage.

: Anu Kattoju

: This SDS replaces the 02/25/2015 SDS. Revised: **Section 1**: . **Section 2**: . **Section 8**: PERSONAL PROTECTIVE EQUIPMENT - SKIN. **Section 10**: HAZARDOUS POLYMERIZATION.

: N/A= Not Applicable

: FOR DENTAL USE ONLY: Use as directed. The information and recommendations are taken from sources (raw material SDS(s) and manufacturer's knowledge) believed to be accurate; however,the manufacturer, makes no warranty with respect to the accuracy of the information or the suitability of the recommendation and assumes no liability to any user thereof. Each user should review these recommendations in the specific context of the intended use and

determine whether they are appropriate.



Printing date 10/05/2021 Reviewed on 08/22/2018

#### 1 Identification

- · Product identifier
- · Trade name: Ultra-EtchTM & OpalTM Etch
- · Article number: SDS 7-001.20, 10947
- · Application of the substance / the mixture Professional Dental Acid Etching Solution
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Ultradent Products Inc.

505 W. Ultradent Drive (10200 S)

South Jordan, UT 84095-3942

USA

onlineordersupport@ultradent.com

- · Information department: Customer Service
- · Emergency telephone number:

CHEMTREC (NORTH AMERICA) : (800) 424-9300 (INTERNATIONAL) : +(703) 527-3887

#### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



Acute Tox. 4 H332 Harmful if inhaled.

- · Label elements
- · GHS label elements Void
- · Hazard pictograms GHS05, GHS07, GHS08
- · Signal word Danger
- · Health Hazard-determining components of labeling:

Phosphoric Acid

· Hazard statements

Harmful if inhaled.

Causes severe skin burns and eye damage.

Suspected of damaging fertility or the unborn child.

· Precautionary statements

P201

Obtain special instructions before use.

(Contd. on page 2)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 1)

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dusts or mists. P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection. P280

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/

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.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label). P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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

regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = \*3Fire = 0

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:	
7664-38-2	Phosphoric Acid	≥25-<40%
	♠ Acute Tox. 1, H330; ♠ Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318; ♠ Acute Tox. 4, H302	
25322-68-3	Polyethylene Glycol	1-10%
	Trade Secret Alternative CAS number: 7631-86-9	1-10%
	Dimethicone	≥0.1-<10%
	❖ Repr. 2, H361; STOT RE 2, H373	

#### 4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

(Contd. on page 3)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 2)

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

If swallowed in large quantities seek medical attention.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

Dry Chemical

Carbon dioxide

Alcohol resistant foam

Water spray

Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture

Phosphine, oxides of phosphorous, hydrogen gas

During heating or in case of fire poisonous gases are produced.

· Advice for firefighters

General: Evacuate all personnel.

Use fire extinguishing methods suitable to surrounding conditions.

· Protective equipment:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Mouth respiratory protective device.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

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:

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.

· 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.

US

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 3)

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Safety glasses should be used by the patient and doctor. Use equipment for eye protection tested and approved under appropriate standards such as ANSI Z87.1

Avoid contact with eyes, skin, and clothing.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: 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.

Provide ventilation for receptacles.

Information about storage in one common storage facility:

Store away from water.

Store away from metals.

· Further information about storage conditions:

Store in a cool place.

See product labelling.

Keep receptacle tightly sealed.

· Specific end use(s) Professional Dental Acid Etching Solution

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

7664	7664-38-2 Phosphoric Acid				
PEL	Long-term value: 1 mg/m³				
REL	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³				
TLV	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³				
25322	-68-3 Polyethylene Glycol				
WEEL	Long-term value: 10 mg/m³ (H); MW>200				
Trade	Secret				
TWA	Short-term value: 0.8 mg/m³				

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Do not eat or drink while working.

(Contd. on page 5)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 4)

When using do not smoke.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

#### Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

### Material of gloves

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### · Eve protection:

Safety glasses should be used and by the patient and doctor. Use equipment for eye protection tested and approved under appropriate standards such as ANSI Z87.1



Tightly sealed goggles

· Body protection: Protective work clothing

#### 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

 Form:
 Gel

 Color:
 Blue

 · Odor:
 Odorless

 · Odor threshold:
 Not determined.

• pH-value at 20 °C: <1

· Change in condition

Melting point/Melting range:Undetermined.Boiling point/Boiling range:100 °C

• Flash point: Not applicable

(Contd. on page 6)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

	(Contd. of page
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C:	$1.3 \text{ g/cm}^3$
Relative density	Not determined
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wa	<b>ter):</b> Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined
Solvent content:	
Water:	<60 %
VOC content:	0.00 %
	0.0g/l / $0.00lb/gal$
VOC (EC)	0.00 %
Solids content:	<20.0 %
Other information	Refractive Index 34-37 Brix

## 10 Stability and reactivity

- · Reactivity Stable
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid

Water, Moist Air

Extreme heat and open flames.

- · Incompatible materials: Strong caustics, most metals
- · Hazardous decomposition products: Phosphine, oxides of phosphorous, hyrogen gas
- Additional information:

Reacts with bases to form phosphate salts and is corrosive (especially when hot) to many metals and alloys. Liberates exposive hydrogen gas when reacting with chlorides and stainless steel, and reacts violently with sodium tetrahydroborate. Forms flammable gases with sulfides, mercaptans, cyanides and aldehydes. Also forms toxic fumes with cyanides, sulfides, fluorides, organic peroxides and halogenated organics

US

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 6)

## 11 Toxicological information

· Information on toxicological effects

LD/LC50	values that are relevant j	for classification:
ATE (Acu	te Toxicity Estimate)	
Oral	LD50	4,358 mg/kg (rat)
Inhalative	LC50/4 h	1.2 mg/l (rabbit)
7664-38-2	Phosphoric Acid	
Oral	LD50	1,530 mg/kg (rat)
Dermal	LD50	2,740 mg/kg (rabbit)
Inhalative	LC50/4 h	0.42225 mg/l (rabbit)
25322-68-	3 Polyethylene Glycol	
Oral	LD50	19,600 mg/kg (Guinea pig)
		17,300 mg/kg (mouse)
		>10,000 mg/kg (rat)
	LC50 Fish	>100 mg/l (Fish)
Dermal	LD50	>20,000 mg/kg (rabbit)
	LC50(Daphnia magna)	>10,000 mg/l (Water Flea) (Toxicity to aquatic invertebrates)
Trade Sec	ret	
Oral	LD50	>15,000 mg/kg (mouse)
		>3,300 mg/kg (rat)
	LC50 Fish	>10,000 mg/l (Fish) (Toxicity to fish)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	0.139 mg/l (rat)

- Primary irritant effect:
- on the skin: Strong caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Corrosive

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

· Carcinogenic categories

,	rnational Agency for Research on Cancer)	
1345-16-0	Dark Blue Pigment	2B
68186-87-8	Cobalt Zinc Aluminate Blue Spinel	2B
68186-85-6	Cobalt Titanate Green Spinel	2B
· NTP (Natio	onal Toxicology Program)	
None of the	ingredients is listed.	

(Contd. on page 8)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 7)

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity:

#### Trade Secret

EC50 > 1,000 mg/kg (daphnia)

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · 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 bodies of water or drainage ditch undiluted or unneutralized.

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.

- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Dispose of contents/container in accordance with international, federal, state, and local regulations.

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

-	4 4		 •	
	1 1	vauchari	OVMAI	1014
	7 /	ransport		*****

٠	UN-Number
---	-----------

· **DOT, IMDG, IATA** UN1805

· UN proper shipping name

• **DOT** Phosphoric acid solution mixture

· IMDG, IATA PHOSPHORIC ACID, SOLUTION mixture

(Contd. on page 9)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 8)

#### · Transport hazard class(es)

 $\cdot DOT$ 



· Class 8 Corrosive substances

· Label

· IMDG, IATA



· Class 8 Corrosive substances

· Label

· Packing group

· DOT, IMDG, IATA

· Environmental hazards: Not Applicable.

· Special precautions for user Warning: Corrosive substances

Hazard identification number (Kemler code): 80
 EMS Number: F-A,S-B
 Segregation groups Acids
 Stowage Category A

• Segregation Code SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not Applicable.

· Transport/Additional information:

 $\cdot$  **DOT** 

• Quantity limitations On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

 $\cdot$  IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)
 5L
 Code: El

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

· UN "Model Regulation": UN 1805 PHOSPHORIC ACID, SOLUTION MIXTURE, 8, III

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- Sara
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

(Contd. on page 10)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

		(Contd. of pag
	pecific toxic chemical listings):	
	hosphoric Acid	
	uminium Oxide	
	ark Blue Pigment	
	obalt Zinc Aluminate Blue Spinel	
68186-85-6 C	obalt Titanate Green Spinel	
•	Substances Control Act):	
7664-38-2 Pi	nosphoric Acid	ACTIV
25322-68-3 Po	olyethylene Glycol	ACTIV
Hazardous Air	Pollutants	•
1345-16-0 D	ark Blue Pigment	
68186-87-8 C	obalt Zinc Aluminate Blue Spinel	
68186-85-6 C	obalt Titanate Green Spinel	
Proposition 65		
Chemicals kno	wn to cause cancer:	
None of the ing	redients is listed.	
Chemicals kno	wn to cause reproductive toxicity for females:	
None of the ing	redients is listed.	
Chemicals kno	wn to cause reproductive toxicity for males:	
None of the ing	redients is listed.	
Chemicals kno	wn to cause developmental toxicity:	
None of the ing	redients is listed.	
Carcinogenic (	categories	
EPA (Environ	mental Protection Agency)	
None of the ing	redients is listed.	
ACGIH Carcii	nogenicity (American Conference of Governmental Industrial Hygienists)	
1344-28-1 Alu	minium Oxide	1
NIOSH-Ca (N	ational Institute for Occupational Safety and Health)	
	redients is listed.	

## 16 Other information

dental professionals.

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.

- · Department issuing SDS: Environmental, Health, and Safety
- · Contact: Customer Service
- · Date of preparation / last revision 10/05/2021 / -
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

 ${\it IATA: International Air Transport Association}$ 

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)

(Contd. on page 11)

Printing date 10/05/2021 Reviewed on 08/22/2018

Trade name: Ultra-Etch<sup>TM</sup> & Opal<sup>TM</sup> Etch

(Contd. of page 10)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, ÉU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

KEL: Recommended Exposure Limit
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 1: Acute toxicity – Category 1

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Repr. 2: Reproductive toxicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

US