according to Regulation (EC) No. 453/2010

Dental Use

PRODUCTS, INC.

 Date Issued :
 2/23/2006

 SDS No :
 26-001.8

 Date Revised :
 1/29/2015

 Revision No :
 8

PQ1™

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

| 1.1. Product identifier         |  |  |
|---------------------------------|--|--|
| Product code                    | : PO/63311   |  |
| Product name                    | : PQ1™   |  |
| Product description             | : Single resin bonding agent                         |  |
| 1.2. Relevant identified uses   | of the substance or mixture and uses advised against |  |
| Relevant identified uses        | : Professional Dental Bonding Agent                  |  |
| 1.3. Details of the supplier of | the safety data sheet                                |  |
| Manufacturer                    | Distributor  |  |
| Ultradent Products, Inc.        | Ultradent Products GmbH                              |  |
| 505 W. 10200 S.                 | Am Westhover Berg 30                                 |  |
| South Jordan, UT 84095          | 51149 Cologne Germany                                |  |
|                                 | Email: infoDE@ultradent.com                          |  |

# **1.4. Emergency telephone number**

CHEMTREC (NORTH AMERICA) :(800) 424 - 9300 (INTERNATIONAL) :+1(703) 527 - 3887

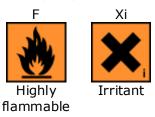
# **SECTION 2: Hazards identification**

| 2.1. Classification of the substance or mixture  |                  |  |
|--|------------------|--|
| Classification according to Directive 1999/45/EC |                  |  |
| Danger symbols                                   | <b>:</b> F,Xi    |  |
| R phrases  | <b>:</b> R36,R22 |  |
| 2.2. Label elements                              |                  |  |

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

# Classification according to Directive 1999/45/EC

Hazard pictogram(s)



R&S statement(s)

: R36: Irritating to eyes. R22: Harmful if swallowed.

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

:

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Hazard pictogram(s)

|                     | Exclamation Flame<br>mark                                     |
|---------------------|---|
| Signal Word         | : WARNING   |
| Hazard statement(s) | : H320: Causes eye irritation.<br>H302: Harmful if swallowed. |
| 2.2 Other hanarda   |   |

# 2.3. Other hazards

Immediate concerns

: Highly Flammable

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# SECTION 3: Composition / information on ingredients

## 3.1. Substances

Not Applicable

#### 3.2. Mixtures

| Chemical Name                 | CAS        | EINECS<br>No. | Wt.% | Classification<br>according to<br>Directive<br>67/548/EEC |
|-------------------------------|------------|---------------|------|---|
| Ethyl Alcohol                 | 64-17-5    | 200-578-6     | < 10 | F; R11  |
| 2-hydroxyethyl Methacrylate   | 868-77-9   | 212-782-2     | < 15 | Xi; R43;<br>R36/38  |
| Methacrylic Acid              | 79-41-4    | 201-204-4     | < 10 | C; R34  |
| Ethyl-4-Dimetylamino Benzoate | 10287-53-3 | 233-634-3     | < 5  | Xi; R36/37/38   |

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

# **SECTION 4: First aid measures**

| 4.1. Description of first aid me | easures   |
|----------------------------------|---|
| Following eyes                   | <ul> <li>Immediately flush eyes with plenty of water. Get medical attention, if<br/>irritation persists.</li> </ul>   |
| Following skin                   | : Wash with soap and water. Get medical attention if irritation develops or persists.   |
| Following ingestion              | <ul> <li>If swallowed, rinse mouth with water, Do NOT Induce Vomiting. Give<br/>victim a glass of water or milk. Call a physician or poison control<br/>center immediately. Never give anything by mouth to an unconscious<br/>person.</li> </ul> |
| Following inhalation             | No specific treatment is necessary since this material is not likely to be<br>hazardous by inhalation. If exposed to excessive levels of dusts or<br>fumes, remove to fresh air and get medical attention if cough or other                       |

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|                                   | symptoms develop.  |
|-----------------------------------|--|
| 4.2. Most important symptoms a    | nd effects, both acute and delayed   |
| Eyes                              | : Causes eye irritation.   |
| Skin                              | : May cause skin irritation and sensitization.   |
| Ingestion                         | : May be harmful if swallowed.   |
| Inhalation                        | : None expected for this product.  |
| 4.3. Indication of any immediate  | e medical attention and special treatment needed   |
| Notes to physician                | : Not Applicable   |
| SECTION 5: Fire fighting measured | res  |
| 5.1. Extinguishing media          |  |
| Extinguishing media               | : Please see Fire Fighting Equipment under Section 5.3.  |
| 5.2. Special hazards arising from | n the substance or mixture   |
| 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          | <ul> <li>General: Evacuate all personnel; use protective equipment for fire-<br/>fighting. Use self-contained breathing apparatus when the product is<br/>involved in fire.</li> </ul> |
| Fire fighting equipment           | : Foam, dry chemical, carbon dioxide (CO <sub>2</sub> ).   |
| SECTION 6: Accidental release n   | neasures   |
| 6.1. Personal precautions, prote  | ctive equipment and emergency procedures   |
| General procedures                | : Refer to Section 8 for Personal Protective Equipment.  |
| 6.2. Environmental precautions    |  |
| Water spill                       | : Do not allow to enter sewers or drains that may lead to waterways.   |
| 6.3. Methods and material for co  | ntainment and cleaning up  |
| Small spill                       | : Absorb liquid and place in sealed container for disposal. Vapors can travel to an ignition source.   |
| 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   | je   |
| 7.1. Precautions for safe handlin | g  |

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|---------------------------------------|---|
| Handling                              | : Keep away from heat, sparks and flame.                                    |
| Storage                               | : See product labeling.   |
| 7.2. Conditions for safe storag       | je, including any incompatibilities   |
| Shelf life                            | : See product labeling  |
| 7.3. Specific end use(s)              |   |
| Specific end use(s)                   | : Professional Dental Bonding Agent   |
| SECTION 8: Exposure controls          | s / personal protection   |
| 8.1. Control parameters               |   |
| Control parameters                    | : Not Determined  |
| 8.2. Exposure controls                |   |
| Eye/face protection                   | : Wear eye protection   |
| Skin protection                       | : S36/37: Wear suitable protective clothing and gloves.                     |
| Respiratory protection                | : Good general ventilation should be sufficient to control airborne levels. |
| SECTION 9: Physical and cher          | nical properties  |
| 9.1. Information on basic phys        | sical and chemical properties   |
| Physical state                        | : Liquid, medium viscosity  |
| Appearance                            | : Yellow resin  |
| Colour                                | : Yellow  |
| Odour                                 | : Acrylic, pungent  |
| 9.2. Other information                |   |
| Percent volatile                      | : Not Determined  |
| SECTION 10: Stability and rea         | ctivity   |
| 10.1. Reactivity                      |   |
| Reactivity                            | : Stable  |
| 10.2. Chemical stability              |   |
| Chemical stability                    | : Stable when stored and handled under recommended conditions.              |
| <b>10.3.</b> Possibility of hazardous | reactions   |
| Hazardous polymerization              | : Will not occur.   |
| <b>10.4.</b> Conditions to avoid      |   |
| Conditions to avoid                   | : Avoid light exposure.   |
| 10.5. Incompatible materials          |   |
| Incompatible materials                | : None known.   |
| 10.6. Hazardous decompositio          | n products  |
| Hazardous decomposition               | : None known.   |
|                                       |   |

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| products                              |   |
|---------------------------------------|---|
| SECTION 11: Toxicological infor       | mation  |
| 11.1. Information on toxicologic      | al effects  |
| Acute                                 |   |
| Dermal LD <sub>50</sub>               | : Not Determined  |
| Oral LD <sub>50</sub>                 | : Not Determined  |
| Inhalation LC <sub>50</sub>           | : Not Determined  |
| SECTION 12: Ecological informa        | tion  |
| 12.1. Toxicity                        |   |
| Aquatic toxicity (acute)              | : Do not allow to enter sewers or drains that may lead to waterways.              |
| 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 degradabi       |   |
| Persistence and degradability         | : Not Determined  |
| 12.3. Bioaccumulative potential       |   |
| Bioaccumulative potential             | : Not Determined  |
| 12.4. Mobility in soil                |   |
| Mobility in soil                      | : Not Determined  |
| 12.5. Results of PBT and vPvB as      | ssessment   |
| Results of PBT and vPvB<br>assessment | : Not Determined  |
| 12.6. Other adverse effects           |   |
| Environmental data                    | : Stable when stored and handled under recommended conditions.                    |
| SECTION 13: Disposal considera        | itions  |
| 13.1. Waste treatment methods         |   |
| Disposal method                       | : Dispose of in compliance with governmental regulation.(EC 1975L0442-20/11/2003) |
| SECTION 14: Transport information     | tion  |
| 14.1. UN number                       |   |
| UN number                             | : 1987  |
| 14.2. UN proper shipping name         |   |
| UN proper shipping name               | : Alcohols, n.o.s. (Ethyl alcohol mixture)  |
| 14.3. Transport hazard class(es)      |   |

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| Hazard classification<br>14.4. Packing group<br>Packing group | : 3   |
|---|---|
|   |   |
| Packing group   |   |
|   | : III   |
| 14.5. Environmental hazards                                   |   |
| Marine pollutant #1   | : Not Applicable  |
| 14.6. Special precautions for use                             | r   |
| ADR - road  | : N/A   |
| RID - rail  | : N/A   |
| IMDG - sea  | : N/A   |
| IATA - air  | : N/A   |
| 14.7. Transport in bulk according                             | g to Annex II of MARPOL73/78 and the IBC Code   |
| Transport in bulk   | : N/A   |
| SECTION 15: Regulatory informa                                | ation   |
| 15.1. Safety, health and environ                              | mental regulations/legislation specific for the substance or mixture  |
| RoHS  | : Please refer to Medical Devices Directive 93/42/EEC   |
| 15.2. Chemical safety assessmen                               |   |
| Chemical safety assessment                                    | : Not Determined  |
| SECTION 16: Other information                                 |   |
| Relevant R-phrases and/or H-<br>statements (number and full   | : R11: Highly flammable.<br>R34: Causes burns.<br>R36/37/38: Irritating to eyes, respiratory system and skin.   |
| text)   | R36/38: Irritating to eyes and skin.<br>R43: May cause sensitization by skin contact.   |
| -   | R36/38: Irritating to eyes and skin.<br>R43: May cause sensitization by skin contact.<br>: Anu Kattoju  |
| text)   | R43: May cause sensitization by skin contact.   |
| text)<br>Prepared by  | <ul><li>R43: May cause sensitization by skin contact.</li><li>: Anu Kattoju</li><li>: This SDS replaces the 4/5/2013 SDS. Revised: Section 1: GENERAL</li></ul> |
| Statements (number and run                                    | R36/37/38: Irritating to eyes, respiratory system and skin.   |



Date Issued : 9/6/2012 MSDS No : 7-001.11 Date-Revised : 9/24/2012 Revision No : 12

# Ultra-Etch®

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME: Ultra-Etch® PRODUCT DESCRIPTION: Phosphoric Acid dentin etchant PRODUCT CODE/ PART #: UX/10947 MANUFACTURER

Ultradent Products, Inc. 505 W. 10200 S. South Jordan, UT 84095

## 24 HR. EMERGENCY TELEPHONE NUMBERS CHEMTREC (NORTH AMERICA) :(800) 424 - 9300 (INTERNATIONAL) :+1(703) 527 - 3887

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name                     | CAS        | EINECS    | Classification    | Wt.%    |
|-----------------------------------|------------|-----------|-------------------|---------|
| Phosphoric Acid                   | 7664-38-2  | 231-633-2 | C; R34            | 32 - 38 |
| Cobalt aluminate blue spinel      | 1345-16-0  | 310-193-6 | R36/37/38,<br>R22 | < 1     |
| Cobalt zinc aluminate blue spinel | 68186-87-8 | 269-049-5 | R36/37/38,<br>R22 | < 1     |

(Full text of R-Phrases can be found under heading 16)

#### 3. HAZARDS IDENTIFICATION

#### HAZARD DESIGNATION

"C" - Corrosive R34: Causes burns.

#### **EMERGENCY OVERVIEW**

**IMMEDIATE CONCERNS:** Corrosive. Will cause eye burns and permanent tissue damage.

#### POTENTIAL HEALTH EFFECTS

EYES: Causes severe eye burns.

SKIN: Corrosive, causes skin burning.

INGESTION: Harmful if swallowed.

INHALATION: R37: Irritating to respiratory system.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**INGESTION:** May cause chemical burns to the mouth and throat. May also cause a burning sensation, swallowing difficulties, vomiting, diarrhea and possible shock.

#### 4. FIRST AID MEASURES

**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.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.



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# Ultra-Etch®

**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.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

#### 5. FIRE FIGHTING MEASURES

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.

#### 6. ACCIDENTAL RELEASE MEASURES

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.

#### ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not allow to enter sewers or drains that may lead to waterways.

#### 7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin and clothing.

HANDLING: Use suitable protective equipment.

**STORAGE:** Room Temperature

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear eye protection **SKIN:** S36/37: Wear suitable protective clothing and gloves.

**RESPIRATORY:** S51: Use only in well-ventilated areas.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### PHYSICAL STATE: Gel

**ODOR:** Odorless or no characteristic odor

COLOR: Blue

SOLUBILITY IN WATER: Partially soluble in water.

## **10. STABILITY AND REACTIVITY**

#### HAZARDOUS POLYMERIZATION: No

STABILITY: Stable when stored and handled under recommended conditions.

CONDITIONS TO AVOID: Avoid strong bases, Metals. Excess heat, exposure to moist air or water.

HAZARDOUS DECOMPOSITION PRODUCTS: Phosphine, oxides of phosphorous, hydrogen gas

INCOMPATIBLE MATERIALS: Strong caustics, most metals.

# PRODUCTS, INC.

Date Issued : 9/6/2012 MSDS No : 7-001.11 Date-Revised : 9/24/2012 Revision No : 12

# Ultra-Etch®

SAFETY DATA SHEET

**COMMENTS:** 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.

## **11. TOXICOLOGICAL INFORMATION**

EYE EFFECTS: Causes severe eye burns.

SKIN EFFECTS: Corrosive, causes skin burning.

#### 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **ECOTOXICOLOGICAL INFORMATION:** Water pollutant

#### **13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Dispose of in compliance with governmental regulation. (EC 1975L0442-20/11/2003)

#### 14. TRANSPORT INFORMATION

## ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Corrosive liquid, n.o.s. \* Phosphoric acid mixture

HAZARD CLASS: 8

PACKING GROUP: III

## AIR (ICAO/IATA)

SHIPPING NAME: Corrosive liquid, n.o.s. \* Phosphoric acid mixture

**UN/NA NUMBER:** 1760

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

## VESSEL (IMO/IMDG)

SHIPPING NAME: Corrosive liquid, n.o.s. \* Phosphoric acid mixture

UN/NA NUMBER: 1760

## PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

LIMITED QUANTITY: 1 L

## **15. REGULATORY INFORMATION**

EUROPEAN COMMUNITY



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# Ultra-Etch®

## EEC LABEL SYMBOL AND CLASSIFICATION



"C" - Corrosive R34: Causes burns.

**COMMENTS** IARC has identified Cobalt and Cobalt compounds as "possibly carcinogenic" as a group, however IARC did not specifically identify the cobalt compound in this product as a possible carcinogen.

OSHA- Select Carcinogens: Present

### **16. OTHER INFORMATION**

## RELEVANT R-PHRASES: R34: Causes burns.

R36/37/38: Irritating to eyes, respiratory system and skin.

R22: Harmful if swallowed.

## PREPARED BY: Anu Kattoju

**REVISION SUMMARY:** This MSDS replaces the 7/26/2011 MSDS. Revised: **Section 1:** Date Issued, PREPARED BY, PRODUCT CODE/ PART #. **Section 2:** SIGNS AND SYMPTOMS OF OVEREXPOSURE (INHALATION, SKIN). **Section 7:** STORAGE. **Section 11:** EYE EFFECTS. **Section 15:** COMMENTS.

**MANUFACTURER DISCLAIMER:** FOR DENTAL USE ONLY: Use as directed. The information and recommendations are taken from sources (raw material MSDS(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.