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Safety Data Sheet acc. to OSHA HCS

Printing date 08/18/2022

Reviewed on 08/18/2022

Identification	
Product identifier	
Trade name: <u>PQ1<sup>TM</sup></u>	
Article number: SDS 26-001.13, 63311 Application of the substance / the mixture Professional L	Dental Bonding Agent
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	
Hazard(s) identification	
Flammable Liquids 3 H226 Flammable liquid and vapor.	
Skin Corrosion 1A H314 Causes severe skin burns and	d eye damage.
Eye Damage 1 H318 Causes serious eye damage.	
Sensitization - Skin 1 H317 May cause an allergic skin re	eaction.
Sensinization Shun 1 1151, may cause an area Sie Shun i	
Label elements GHS label elements Void Hazard pictograms GHS02, GHS05, GHS07 Signal word Danger	
Label elements GHS label elements Void Hazard pictograms GHS02, GHS05, GHS07	

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	vere skin burns and eye damage.
	an allergic skin reaction.
· Precautionary st	tatements
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dusts or mists.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
<i>P301+P330+P3</i> .	31 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P3.	53 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+P3.	38 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).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use CO2, powder or water spray to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
· Classification sy	stem:
· NFPA ratings (s	cale 0 - 4)
Fin	ealth = 3 re = 3 eactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH\*3Health = \*3FIRE3Fire = 3REACTIVITY0Reactivity = 0

# 3 Composition/information on ingredients

### • Chemical characterization: Mixtures

• **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
	Trade Secret	>10- <b>≤</b> 25%
868-77-9	2-Hydroxyethyl Methacrylate	>10- <i>≤</i> 25%
64-17-5	Ethyl Alcohol	1-10%
2530-85-0	Silane	<i>≥</i> 0-<10%
79-41-4	Methacrylic Acid	≥5-≤10%
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162881-26-7 Organophosphine Oxide	<i>≥</i> 0.1-<1%

#### • Additional information:

The specific chemical identity of composition is being withheld as a trade secret. The specific chemical identity is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of paragraph §1910.1200.

#### 4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- After inhalation:
- Supply fresh air and to be sure call for a doctor.
- 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:
- Rinse mouth with water.
- 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: Foam, dry chemical, carbon dioxide
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- Advice for firefighters
- · Protective equipment:
- Wear fully protective suit.
- 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.

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See Section 13 for disposal information.

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#### 7 Handling and storage

· Handling:

- Precautions for safe handling
   Ensure good ventilation/exhaustion at the workplace.
   Prevent formation of aerosols.
   Information about protection against explosions and fires:
- Keep ignition about protection against explosions and fire Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- *Further information about storage conditions:* See product labelling.
- Keep receptacle tightly sealed.
- · Specific end use(s) Professional Dental Bonding Agent

#### 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 other constituents have no known exposure limits.

#### 64-17-5 Ethyl Alcohol

- PEL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm
- REL Long-term value: 1900 mg/m<sup>3</sup>, 1000 ppm
- STEL Short-term value: 1000 mg/m<sup>3</sup>
- *TLV* Short-term value: 1000 ppm A3
- *TWA* Short-term value: 1900 mg/m<sup>3</sup>

79-41-4 Methacrylic Acid

- *REL* Long-term value: 70 mg/m<sup>3</sup>, 20 ppm Skin
- TLV Long-term value: 20 ppm

• Additional information: The lists that were valid during the creation were used as basis.

#### · Exposure controls

- Personal protective equipment:
- General protective and hygienic measures:
- *Ensure that washing facilities are available at the work place. Keep away from foodstuffs, beverages and feed.*
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.

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Avoid contact with the eyes. 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. • Eye protection: Tightly sealed goggles · Body protection: Protective work clothing 9 Physical and chemical properties · Information on basic physical and chemical properties · General Information

· Appearance:		
Form:	Liquid	
Color:	Yellow	
· Odor:	Acrylic	
• Odor threshold:	Not determined.	
· pH-value:	Not applicable (non-aqueous)	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined	
· Flash point:	36 °C	
· Flammability (solid, gaseous):	Flammable.	
• Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
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Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C:	$1.39 \text{ g/cm}^3$
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	uter): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined
Solvent content:	
VOC content:	≥10% - <i>≤</i> 30 %
	343.3 g/l / 2.87 lb/gal
VOC (EC)	≥10% - ≤30%
Other information	No further relevant information available.

# **10 Stability and reactivity**

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

Vonk

Flames

Heat

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

## **11 Toxicological information**

· Information on toxicological effects

• Acute toxicity:

· LD/LC50	values that are rel	evant for classification:	
ATE (Acu	te Toxicity Estima	te)	
Oral	LD50	17,667 mg/kg	
Dermal	LD50	17,667 mg/kg 8,333 mg/kg (rabbit) 118 mg/l	
Inhalative	LC50/4 h	118 mg/l	
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868-77-0 2	P-Hydroxyethyl Methacr	(Contd. of page
	LD50	
Oral		3,275  mg/kg (mouse)
	IC50 Fish	>5,000  mg/kg (rat)
Dame al	LC50 Fish LD50	>100  mg/l (Fish)
Dermal		>3,000 mg/kg (rabbit)
( 4 17 5 5	LC50(Daphnia magna)	24.1 mg/i (aapinia)
	thyl Alcohol	
Oral	LD50	5,600 mg/kg (Guinea pig)
		3,400 mg/kg (mouse)
		7,060 mg/kg (rat)
<b></b> .	LC50 Fish	>10,000  mg/l (Fish)
Inhalative	LC50/4 h	<i>39 mg/l (mouse)</i>
		20,000 mg/l (rat)
	ethacrylic Acid	
Oral	LD50	1,250 mg/kg (mouse)
		1,060 mg/kg (rat)
		1,200 mg/kg (rabbit)
	LC50 Fish	86 mg/l (Fish)
Dermal	LD50	1,000 mg/kg (Guinea pig)
		500 mg/kg (rabbit)
Inhalative	LC50/4 h	7.1 mg/l (rat)
162881-26	-7 Organophosphine Ox	<i>side</i>
Oral	LD50	>2,000 mg/kg (rat)
	LC50 Fish	>0.09 mg/l (Fish) (Toxicity to fish)
Dermal	LD50	>2,000 mg/kg (rat)
on the eye. Strong cau Strong irri Sensitizati Additional The produc Corrosive Irritant	: istic effect. tant with the danger of s on: Sensitization possibl toxicological informati ct shows the following da g will lead to a strong ca	e through skin contact.
	nic categories	
	ernational Agency for R	esearch on Cancer)
64-17-5	Ethyl Alcohol	
128-37-0	Butylated Hydroxytoluer	ie .
NTP (Nati	onal Toxicology Progra	<i>m</i> )
	e ingredients is listed.	·
None oj in	e ingreaienis is iisiea.	

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

None of the ingredients is listed.

### **12 Ecological information**

· Toxicity

· Aquatic toxicity:		
868-77-9 2-Hydroxyethyl Methac	rylate	
EC50	345 mg/kg (Algae)	
64-17-5 Ethyl Alcohol		
Algae Toxicity	1,000 mg/l (Algae)	
79-41-4 Methacrylic Acid		
EC50	17,000 mg/kg (Algae)	
	<180 mg/kg (daphnia) (Toxicity to aquatic invertebrates)	
162881-26-7 Organophosphine O	Dxide	
EC50 (static)	>1.175 mg/kg (daphnia) (Toxicity to aquatic invertebrates)	
Aqua toxicity	≥0.008 mg/l (daphnia) (Daphnia Magna Reproduction Test)	
Toxicity to Aquatic Plants (static)	>0.26 mg/l (Plant) (Toxicity to algae)	
<b>e</b> .	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.

- · 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.

· UN-Number		
· DOT, IMDG, IATA	UN1987	

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UN proper shipping name	
DOT	Alcohols, n.o.s.
IMDG, IATA	ALCOHOLS, N.O.S. (METHACRYLIC ACID, STABILIZED, Eth Alcohol)
Transport hazard class(es)	
DOT	
P.AMARIE LUID	
Class Label	3 Flammable liquids 3
IMDG, IATA	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, IMDG, IATA	III
Environmental hazards:	Not Applicable.
Special precautions for user	Warning: Flammable liquids
Hazard identification number (Kemler code):	
EMS Number:	F-E,S-D
Stowage Category	В
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not Applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 60 L
	On cargo aircraft only: 220 L
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: El
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1987 ALCOHOLS, N.O.S. (METHACRYLIC ACIL STABILIZED, ETHYL ALCOHOL), 3, III

# **15 Regulatory information**

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

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· Sara	(Contd. of page 9)
· Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
• Section 313 (Specific toxic chemical listings):	
1344-28-1 Aluminium Oxide	
• TSCA (Toxic Substances Control Act):	
868-77-9 2-Hydroxyethyl Methacrylate	ACTIVE
64-17-5 Ethyl Alcohol	ACTIVE
2530-85-0 Silane	ACTIVE
79-41-4 Methacrylic Acid	ACTIVE
162881-26-7 Organophosphine Oxide	ACTIVE
· Hazardous Air Pollutants	
None of the ingredients is listed.	
· Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients is listed.	
• Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
64-17-5 Ethyl Alcohol	
· Carcinogenic categories	
· EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
·ACGIH Carcinogenicity (American Conference of Governmental Industrial Hygienists)	
64-17-5 Ethyl Alcohol	A3
1344-28-1 Aluminium Oxide	A4
128-37-0 Butylated Hydroxytoluene	A4
·NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	

· Chemical safety assessment:

Device is biocompatible when used as directed by dental professionals per ISO 10993-1

## **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.

- Department issuing SDS: Environmental, Health, and Safety
- Contact: Customer Service
- · Date of preparation / last revision 08/18/2022 / -
- Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances

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ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
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
Flammable Liquids 3: Flammable liquids – Category 3
Skin Corrosion 1A: Skin corrosion/irritation – Category 1A
Eye Damage 1: Serious eye damage/eye irritation – Category 1
Sensitization - Skin 1: Skin sensitisation – Category 1
* * Data compared to the previous version altered.
2 um comparen lo me previous version unerem