

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

1.1. Product identifier

Product form : Mixture
Product name : One Step Universal Bond
Product code : S-Chem-508
Other means of identification : L/C Quick-Cure HZ Bonding Resin

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

Use of the substance/preparation : For Professional Dental Use
Adhesion restorative primer

1.3. Details of the supplier of the safety data sheet

Dental Health Products, Inc.
2614 North Sugar Bush Rd.
New Franken, WI, 54229, U.S.A.

Telephone: 1-800-626-2163

Website: www.dhpionline.com

1.4. Emergency telephone number

Emergency number : CHEMTREC
800-424-9300 (USA)
1-703-524-3887 (outside USA)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Eye Irrit. 2B H320
Skin Sens. 1 H317
STOT SE 3 H336
Aquatic Acute 2 H401

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS02

GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapour
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H320 - Causes eye irritation

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Precautionary statements (GHS-US) : H336 - May cause drowsiness or dizziness
H401 - Toxic to aquatic life
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing fume, mist, spray, vapours
P264 - Wash hands and forearms thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P273 - Avoid release to the environment
P280 - Wear eye protection, protective gloves, Respiratory protection
P302+P352 - IF ON SKIN: Wash with plenty of water
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
P312 - Call a POISON CENTER/doctor if you feel unwell
P332+P313 - If skin irritation occurs: Get medical advice/attention
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use water, carbon dioxide (CO₂), powder, or foam for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container according to local, regional, national, and international

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	%	GHS-US classification
Acetone	(CAS No.) 67-64-1	45 - 55	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 Aquatic Acute 2, H401
2-Hydroxyethyl methacrylate	(CAS No.) 868-77-9	5 - 15	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317

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Name	Product identifier	%	GHS-US classification
2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester	(CAS No.) 1830-78-0	1 - 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

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. 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 : Irritation to eyes, skin and respiratory tract.
- Symptoms/injuries after inhalation : Difficulty in breathing. Cough. Dry/sore throat.
- Symptoms/injuries after skin contact : Causes skin irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.
- Symptoms/injuries after eye contact : Causes eye irritation.
- Symptoms/injuries after ingestion : Abdominal pain. Nausea.
- Chronic symptoms : May cause an allergic skin reaction.

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 : Foam, powder, carbon dioxide (CO₂), water spray.
- Unsuitable extinguishing media : Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. If involved in a fire the following toxic and/or corrosive fumes may be produced by thermal decomposition : Carbon dioxide (CO₂); Carbon monoxide.
- 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.

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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.

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. Ventilate area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Use recommended respiratory protection.

Emergency procedures : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. 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 : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

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.

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7.3. Specific end use(s)

Adhesion restorative primer

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetone (67-64-1)		
USA ACGIH	ACGIH TWA	500 ppm
USA ACGIH	ACGIH STEL	750 ppm
USA NIOSH	NIOSH IDLH	2500 ppm (10% LEL)
USA NIOSH	NIOSH REL (TWA)	590 mg/m ³ ; 250 ppm
USA OSHA	OSHA PEL (TWA)	2400 mg/m ³ ; 1000 ppm

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 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
Colour	: Colorless
Odour	: Sweet; Pungent
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 56.1 °C (133 °F) (Acetone)
Flash point	: -18 °C (-0.4 °F) (Acetone)

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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	: 2 (Air = 1) (Acetone)
Relative density	: No data available
Density	: > 1 g/cc
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity	: 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

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

Hazardous polymerization will not occur.

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: Carbon dioxide; Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

2-Hydroxyethyl methacrylate (868-77-9)	
LD50 oral rat	5050 mg/kg
LD50 dermal rabbit	> 3000 mg/kg

Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.

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Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

2-Hydroxyethyl methacrylate (868-77-9)	
LC50 fish 1	213 - 242 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	227 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
Acetone (67-64-1)	
LC50 fish 1	4.74 - 6.33 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	10294 - 17704 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	6210 - 8120 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	12600 - 12700 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

2-Hydroxyethyl methacrylate (868-77-9)	
BCF fish 1	1.34 - 1.54
Log Pow	0.47
Acetone (67-64-1)	
BCF fish 1	0.69
Log Pow	-0.24

12.4. Mobility in soil

No additional information available

12.5. 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 DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT)	: UN1993
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14.2. UN proper shipping name

DOT Proper Shipping Name : Flammable liquids, n.o.s.

Contains: Acetone

Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

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SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

2-Hydroxyethyl methacrylate (868-77-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag : T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester (1830-78-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: Other information

Full text of H- phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitisation Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H315	Causes skin irritation

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H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

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.