

SAFETY DATA SHEET Permabond UV683

1. Identification

Product identifier

Product name Permabond UV683

Recommended use of the chemical and restrictions on use

Application Adhesive. Sealant.

Details of the supplier of the safety data sheet

Supplier Permabond LLC

14 Robinson Street Pottstown, PA 19464

USA

Telephone: 732-868-1372 or 800-640-7599

Website: www.permabond.com

Emergency telephone number

Emergency telephone Medical: Poison Control Center 866-827-6282 (toll free) or 303-389-1109 Transport:

CHEMTREC 800-424-9300

2. Hazard(s) identification

Classification of the substance or mixture

OSHA Regulatory Status Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200)

and is consistent with the provisions of the United Nations Globally Harmonized System of

Classification and Labeling of Chemicals (GHS).

Physical hazards Not Classified

Health hazards Skin Corr. 1C - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361f STOT SE 3 -

H335

Label elements

Pictogram







Signal word

Danger

Hazard statements H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H361f Suspected of damaging fertility.

Precautionary statements

P201 Obtain special instructions before use.

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

P260 Do not breathe vapor/ spray.

P261 Avoid breathing vapor/ spray.

P264 Wash contaminated skin thoroughly after handling.

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

P272 Contaminated work clothing must not be allowed out of the workplace.

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

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P302+P352 If on skin: Wash with plenty of water.

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.

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

P310 Immediately call a poison center/ doctor.

P312 Call a poison center/ doctor if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Contains

ISOBORNYL ACRYLATE, TETRAHYDROFURFURYL ACRYLATE, HEXAMETHYLENE DIACRYLATE, 1,1,1-TRIMETHYLOLPROPANE TRI(3-MERCAPTOPROPIONATE, TRIS(2-

HYDROXYETHYL)ISOCYANURATE TRIACRYLATE, DIPHENYL(2,4,6-

TRIMETHYLBENZOYL)PHOSPHINE OXIDE

Other hazards

None under normal conditions.

3. Composition/information on ingredients

Mixtures

URETHANE ACRYLATE OLIGOMER

30-60%

CAS number: 73297-29-7

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2A - H319

ISOBORNYL ACRYLATE

10-30%

CAS number: 5888-33-5

Classification

Skin Irrit. 2 - H315

Eye Irrit. 2A - H319

Skin Sens. 1 - H317

STOT SE 3 - H335

Not relevant.

TETRAHYDROFURFURYL ACRYLATE

10-30%

CAS number: 2399-48-6

Classification

Skin Corr. 1C - H314 Eye Irrit. 2A - H319

HEXAMETHYLENE DIACRYLATE

10-30%

CAS number: 13048-33-4

Classification

Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317

1,1,1-TRIMETHYLOLPROPANE TRI(3-MERCAPTOPROPIONATE

5-10%

CAS number: 33007-83-9

Classification

Acute Tox. 4 - H302 Skin Sens. 1 - H317 Not relevant.

TRIS(2-HYDROXYETHYL)ISOCYANURATE TRIACRYLATE

5-10%

CAS number: 40220-08-4

Classification

Eye Dam. 1 - H318

DIPHENYL(2,4,6-TRIMETHYLBENZOYL)PHOSPHINE

1-5%

OXIDE

CAS number: 75980-60-8

Classification

Skin Sens. 1B - H317 Repr. 2 - H361f Not relevant.

The full text for all hazard statements is displayed in Section 16.

Composition comments

Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. First-aid measures

Description of first aid measures

Inhalation

Move the exposed person to fresh air. Get medical attention if symptoms are severe or persist.

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Ingestion Do not induce vomiting unless under the direction of medical personnel. Never give anything

by mouth to an unconscious person. Get medical attention immediately.

Skin Contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical

attention promptly if symptoms occur after washing. Wash contaminated clothing before

reuse.

Eye contact Remove any contact lenses and open eyelids wide apart. Promptly wash eyes with plenty of

water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical

attention.

Most important symptoms and effects, both acute and delayed

Inhalation May cause respiratory irritation.

Ingestion May cause chemical burns in mouth and throat.

Skin contact Chemical burns. May cause allergic skin reaction.

Eye contact Causes serious eye damage.

Indication of immediate medical attention and special treatment needed

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide.

Special hazards arising from the substance or mixture

Hazardous combustion

products

Burning produces irritating, toxic and obnoxious fumes. Carbon monoxide, carbon dioxide,

and unknown hydrocarbons.

Advice for firefighters

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions

Environmental precautions Avoid discharge into drains.

Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste

disposal containers and seal securely.

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Keep container

tightly sealed when not in use. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in closed original container at temperatures between 2°C and 7°C. Protect against direct

sunlight. Never return unused material to storage receptacle.

Specific end uses(s)

Usage description Adhesive. Sealant.

8. Exposure Controls/personal protection

Exposure controls

Appropriate engineering

Provide adequate general and local exhaust ventilation. Observe any occupational exposure

controls

limits for the product or ingredients.

Eye/face protection

Hand protection

Nitrile rubber or Viton™ gloves are recommended. Cotton or other absorbent gloves should

not be worn.

Other skin and body

protection

Employee must wear appropriate protective clothing and equipment to prevent any possibility

of skin contact with this substance.

Wash at the end of each work shift and before eating, smoking and using the toilet. Hygiene measures

Use safety goggles and face shield in case of splash risk.

Respiratory protection No specific recommendations. Respiratory protection may be required if excessive airborne

contamination occurs. Use NIOSH approved respirator if there is potential to exceed exposure

limit(s).

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance Liquid.

Color Colorless.

Odor Acrylic

Odor threshold Not available.

Not relevant. pН

Melting point Not available.

Initial boiling point and range Not applicable.

Flash point

Evaporation rate

Flammability (solid, gas) Not applicable.

Upper/lower flammability or

explosive limits

Not available.

Not available.

>93°C (199.94°F)

Not available. Vapor pressure

Vapor density Not available.

1.1 Relative density

Solubility(ies) Insoluble in water. Soluble in the following materials: Organic solvents.

Partition coefficient Not available.

Not available. **Auto-ignition temperature**

Decomposition Temperature Not available. Revision date: 1/31/2018 Revision: 2 Supersedes date: 11/1/2013

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Viscosity ≈1300 mPa s @ 23°C

Oxidizing properties Not available.

Other information Not relevant.

Volatile organic compound Not available. <2 %, 20 grams/liter (Estimated)

10. Stability and reactivity

Reactivity The following materials may react with the product: Strong oxidizing agents.

Stable at normal ambient temperatures and when used as recommended. Polymerizes when

heated.

Possibility of hazardous

reactions

Polymerization may occur at elevated temperature or in the presence of incompatible

materials

Conditions to avoid Do not store near heat sources or expose to high temperatures. Protect against direct

sunlight

Materials to avoid Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition

products

Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified

organic compounds.

11. Toxicological information

Information on toxicological effects

Toxicological effects The toxicological properties of this product have not been fully evaluated. Use of good

industrial hygiene practices is required. Avoid direct contact with skin or eyes. Do not ingest or

inhale.

Skin corrosion/irritation

Skin corrosion/irritation May cause serious chemical burns to the skin.

Serious eye damage/irritation

Serious eye damage/irritation Risk of serious damage to eyes.

Respiratory sensitization

Respiratory sensitization Based on available data the classification criteria are not met.

Skin sensitization

Skin sensitization May cause sensitisation by skin contact.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity No component of this product present at levels great than or equal to 0.1% is identified as a

known carcinogen.

Reproductive toxicity

Reproductive toxicity - fertility Contains a substance/a group of substances which may damage fertility.

Specific target organ toxicity - single exposure

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STOT - single exposure May cause respiratory irritation.

Target organs Respiratory tract

Specific target organ toxicity - repeated exposure

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. Aspiration hazard

Inhalation Irritating to respiratory system.

Ingestion May cause chemical burns in mouth and throat.

Skin Contact This product is strongly irritating. Prolonged contact may cause burns.

Eye contact Causes serious eye damage.

Acute and chronic health

hazards

Causes severe skin burns and eye damage. May cause skin sensitization or allergic reactions

in sensitive individuals. May cause respiratory irritation.

Route of exposure Inhalation Skin and/or eye contact

Target Organs Eyes Skin Respiratory tract

Toxicological information on ingredients.

ISOBORNYL ACRYLATE

Acute toxicity - oral

Acute toxicity oral (LD50

5.000.0

mg/kg)

Species Rat

5,000.0 ATE oral (mg/kg)

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 3,000.0

mg/kg) **Species**

Rabbit

ATE dermal (mg/kg) 3,000.0

HEXAMETHYLENE DIACRYLATE

Acute toxicity - oral

Acute toxicity oral (LD50

5,000.0

mg/kg)

Species Rat

5,000.0 ATE oral (mg/kg)

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 3,650.0

mg/kg)

Rabbit **Species**

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ATE dermal (mg/kg) 3,650.0

TRIS(2-HYDROXYETHYL)ISOCYANURATE TRIACRYLATE

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

2,500.0

Species Rat

ATE oral (mg/kg) 2,500.0

DIPHENYL(2,4,6-TRIMETHYLBENZOYL)PHOSPHINE OXIDE

Acute toxicity - oral

Acute toxicity oral (LD50

5.000.0

mg/kg)

Species Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.1

mg/kg)

Z,000. i

Species Rat

ATE dermal (mg/kg) 2,000.1

12. Ecological Information

Toxicity No data available.

Bioaccumulative potential

Partition coefficient Not available.

13. Disposal considerations

Waste treatment methods

General information Empty containers may contain product residue; follow SDS and label warnings even after they

have been emptied.

Disposal methodsDispose of according to Federal, State and local governmental regulations.

14. Transport information

UN Number

UN No. (IMDG) 1760 UN No. (ICAO) 1760

UN No. (DOT) UN1760

UN proper shipping name

CORROSIVE LIQUID, N.O.S. (contains Tetrahydrofurfuryl acrylate)

Proper shipping name (IMDG) CORROSIVE LIQUID, N.O.S. (contains Tetrahydrofurfuryl acrylate)

Proper shipping name (ICAO) CORROSIVE LIQUID, N.O.S. (contains Tetrahydrofurfuryl acrylate)

Proper shipping name (DOT) CORROSIVE LIQUIDS, N.O.S. (contains Tetrahydrofurfuryl acrylate)

Transport hazard class(es)

DOT hazard class 8
DOT hazard label 8
IMDG Class 8

8

DOT transport labels

ICAO class/division



Transport labels



Packing group

IMDG packing group III
ICAO packing group III
DOT packing group III

Environmental hazards

Environmentally Hazardous Substance



15. Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None above reporting levels

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None above reporting limits

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None above reporting limits

SARA 313 Emission Reporting

None above reporting limits

SARA (311/312) Hazard Categories

Acute Chronic

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm

Inventories

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US-TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None above reporting limits

16. Other information

Classification abbreviations

and acronyms

Eye Dam. = Serious eye damage Skin Corr. = Skin corrosion Skin Sens. = Skin sensitisation

STOT SE = Specific target organ toxicity-single exposure

Repr. = Reproductive toxicity

Revision date 1/31/2018

Revision 2

Supersedes date 11/1/2013

Hazard statements in full H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H361f Suspected of damaging fertility.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.