

# Permabond®

## Engineering Adhesives

### SAFETY DATA SHEET

#### Permabond Polyolefin Primer (POP)

#### 1. Identification

##### Product identifier

**Product name** Permabond Polyolefin Primer (POP)

##### Recommended use of the chemical and restrictions on use

**Application** Primer.

##### 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 Communication and Labeling of Chemicals (GHS).

**Physical hazards** Flam. Liq. 2 - H225

**Health hazards** Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304

**Human health** In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Irritating to eyes. Repeated exposure may cause skin dryness or cracking.

**Environmental** Very toxic to aquatic life with long lasting effects.

**Physicochemical** The product is highly flammable, and explosive vapors/air mixtures may be formed even at normal room temperatures.

##### Label elements

##### Hazard symbols



**Signal word**

Danger

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<b>Hazard statements</b>	H225 Highly flammable liquid and vapor. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways.
<b>Precautionary statements</b>	P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing vapor/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 If swallowed: Immediately call a poison center/ doctor. 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. P312 Call a poison center/ doctor if you feel unwell. P331 Do NOT induce vomiting. P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. 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. Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.
<b>Contains</b>	HEPTANE

### 3. Composition/information on ingredients

#### Mixtures

<b>HEPTANE</b>	<b>60-100%</b>
CAS number: 142-82-5	
<b>Classification</b> Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Not relevant.	
<b>1,8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE</b>	<b>&lt;1%</b>
CAS number: 6674-22-2	
<b>Classification</b> Acute Tox. 3 - H301 Skin Corr. 1B - H314 Eye Dam. 1 - H318	

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

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**Composition comments** The Data Shown is in accordance with the latest EC Directives.

### 4. First-aid measures

#### Description of first aid measures

<b>Inhalation</b>	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Do not induce vomiting. Get medical attention.
<b>Skin Contact</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.

#### Most important symptoms and effects, both acute and delayed

<b>General information</b>	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
<b>Inhalation</b>	Vapours may cause drowsiness and dizziness.
<b>Ingestion</b>	Aspiration hazard if swallowed.
<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin.

#### Indication of immediate medical attention and special treatment needed

<b>Notes for the doctor</b>	Avoid vomiting and stomach flushing because of the risk of aspiration.
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### 5. Fire-fighting measures

#### Extinguishing media

<b>Suitable extinguishing media</b>	Foam, carbon dioxide or dry powder.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

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

<b>Specific hazards</b>	The product is flammable. Heating may generate flammable vapors. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.
<b>Hazardous combustion products</b>	Irritating gases or vapors. Toxic gases or vapors. Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO).
<b>Advice for firefighters</b>	
<b>Protective actions during firefighting</b>	Containers close to fire should be removed or cooled with water.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### 6. Accidental release measures

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

<b>Personal precautions</b>	Wear protective clothing as described in Section 8 of this safety data sheet. Eliminate all sources of ignition. Provide adequate ventilation.
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## Permabond Polyolefin Primer (POP)

### Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses.

### Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb in vermiculite, dry sand or earth and place into containers.

**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** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. During application and drying, solvent vapors will be emitted. Avoid contact with skin and eyes. Avoid breathing vapours.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Storage class** Flammable liquid storage.

### Specific end uses(s)

**Specific end use(s)** Primer.

## 8. Exposure controls/Personal protection

### Control parameters

### Occupational exposure limits

#### HEPTANE

Long-term exposure limit (8-hour TWA): ACGIH 400 ppm 1640 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 500 ppm 2050 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): OSHA 500 ppm 2000 mg/m<sup>3</sup>

ACGIH = American Conference of Governmental Industrial Hygienists.  
OSHA = Occupational Safety and Health Administration.

### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

#### Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

#### Other skin and body protection

Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact. Provide eyewash station and safety shower. Uniforms, coveralls, or a lab coat should be worn

#### Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Use of good industrial hygiene practices is required.

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**Respiratory protection** Provide adequate ventilation. Respiratory protection may be required if excessive airborne contamination occurs. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved.

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Color</b>	Colorless.
<b>Odor</b>	Characteristic.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not relevant.
<b>Melting point</b>	Not available.
<b>Initial boiling point and range</b>	96.1-98.9°C/205-210°F
<b>Flash point</b>	-2°C/28.4°F
<b>Evaporation rate</b>	Not determined.
<b>Upper/lower flammability or explosive limits</b>	Upper flammable/explosive limit: 7 % Lower flammable/explosive limit: 1.1 %
<b>Vapor density</b>	Not available.
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Decomposition Temperature</b>	Not available.
<b>Explosive properties</b>	Not determined.
<b>Oxidizing properties</b>	Not available.

### 10. Stability and reactivity

<b>Reactivity</b>	The following materials may react with the product: Strong oxidizing agents.
<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	There are no known reactivity hazards associated with this product.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
<b>Materials to avoid</b>	Acids. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No data available.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Information given is based on data of the components and of similar products. Avoid breathing vapours. Avoid contact with eyes and prolonged skin contact.

#### Skin corrosion/irritation

**Skin corrosion/irritation** Irritating to skin.

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### Serious eye damage/irritation

**Serious eye damage/irritation** Slightly irritating.

### Respiratory sensitization

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

### Skin sensitization

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

### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

**Genotoxicity - in vivo** Based 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** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** May cause central nervous system disorder (e.g. narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage.

**Target organs** Central nervous system

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

### Aspiration hazard

**Aspiration hazard** Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

**Inhalation** Vapors have a narcotic effect. May cause respiratory system irritation.

**Ingestion** May be harmful if swallowed and enters airways.

**Skin Contact** Causes skin irritation.

**Eye contact** Irritating and may cause redness and pain.

**Route of exposure** Inhalation Ingestion Skin and/or eye contact

### Toxicological information on ingredients.

#### HEPTANE

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 5,000.0

**Species** Rat

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 2,001.0

**Species** Rabbit

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### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l) 29.29

Species Rat

### Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

### Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

### Skin sensitization

Skin sensitization Not sensitizing.

### Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

### Reproductive toxicity

Reproductive toxicity - fertility One-generation study - NOAEL 31680 mg/m<sup>3</sup>, Inhalation, Rat

### Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness.

### Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

### Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

### 1,8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE

### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 300.0

Species Rat

### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,233.0

Species Rabbit

### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) No information available.

### Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

### Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation. Rabbit Corrosive

### Skin sensitization

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<b>Skin sensitization</b>	No information available.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Gene mutation: Negative.
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	No information available.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Screening - NOAEL 150 mg/kg/day, Oral, Rat F1
<b>Reproductive toxicity - development</b>	Developmental toxicity: - NOAEL: 150 mg/kg/day, Oral, Rat
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	No information available.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	No information available.
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	No information available.

### 12. Ecological information

<b>Ecotoxicity</b>	Very toxic to aquatic life with long lasting effects.
<b>Toxicity</b>	No information available.
<b><u>Persistence and degradability</u></b>	
<b>Persistence and degradability</b>	The product is readily biodegradable.
<b><u>Bioaccumulative potential</u></b>	
<b>Bio-Accumulative Potential</b>	Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
<b>Partition coefficient</b>	Not determined.
<b><u>Mobility in soil</u></b>	
<b>Mobility</b>	The product contains organic solvents which will evaporate easily from all surfaces.
<b><u>Other adverse effects</u></b>	
<b>Other adverse effects</b>	None known.

### 13. Disposal considerations

#### Waste treatment methods

<b>General information</b>	Dispose of according to Federal, State/Provincial and local regulations. Refer to section 8 before handling. Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.
<b>Disposal methods</b>	Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Containers should be thoroughly emptied before disposal because of the risk of an explosion.

### 14. Transport information

#### UN Number

## Permabond Polyolefin Primer (POP)

**UN No. (International)** 1206

**UN No. (DOT)** UN1206

### UN proper shipping name

**Proper shipping name (IMDG)** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7, n-Alkanes, isoalkanes,cyclics) (1,2-dichloroethylene)

**Proper shipping name (ICAO)** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7, n-Alkanes, isoalkanes,cyclics) (1,2-dichloroethylene)

**Proper shipping name (DOT)** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7, n-Alkanes, isoalkanes,cyclics) (1,2-dichloroethylene)

### Transport hazard class(es)

**Transport Labels (International)** 3

**DOT hazard class** 3

### Transport labels



### Packing group

**Packing group (International)** II

**DOT packing group** II

### 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  
Fire

### Inventories

## Permabond Polyolefin Primer (POP)

### 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

<b>Classification abbreviations and acronyms</b>	Flam. Liq. = Flammable liquid Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation STOT SE = Specific target organ toxicity-single exposure Asp. Tox. = Aspiration hazard
<b>Revision date</b>	10/15/2020
<b>Revision</b>	2
<b>Supersedes date</b>	10/1/2018
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapor. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H336 May cause drowsiness or dizziness.

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.