

Permabond®

Engineering Adhesives

SAFETY DATA SHEET

Permabond QFS10

1. Identification

Product identifier

Product name Permabond QFS10

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 Eye Irrit. 2A - H319 STOT SE 3 - H336

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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Hazard statements	H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	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. 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. P312 Call a poison center/ doctor if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/ attention. 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. P501 Dispose of contents/ container in accordance with national regulations.

Contains ETHYL ACETATE

3. Composition/information on ingredients

Mixtures

ETHYL ACETATE	60-100%
CAS number: 141-78-6	
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2A - H319	
STOT SE 3 - H336	
N,N-DIMETHYL-PARA-TOLUIDINE	<1%
CAS number: 99-97-8	
Classification	
Acute Tox. 3 - H301	
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
STOT RE 2 - H373	
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

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Description of first aid measures

Inhalation	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.
Ingestion	Do not induce vomiting. Get medical attention.
Skin Contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	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

Inhalation	Vapours may cause drowsiness and dizziness.
Eye contact	Causes serious eye irritation.

5. Fire-fighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture

Specific hazards	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.
Hazardous combustion products	Irritating gases or vapors, Toxic gases or vapors, Carbon dioxide (CO ₂), Carbon monoxide (CO).

Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water.
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. Eliminate all sources of ignition. Provide adequate ventilation.
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Environmental precautions

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

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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

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): ACGIH 400 ppm 1440 mg/m³

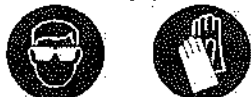
Long-term exposure limit (8-hour TWA): OSHA 400 ppm 1400 mg/m³

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.

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

Color Colorless.

Odor Characteristic.

Odor threshold Not available.

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pH	Not relevant.
Melting point	-84°C/-119°F
Initial boiling point and range	76.5°C/169.7°F
Flash point	-3°C/26.6°F
Evaporation rate	Not determined.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 11.5 % Lower flammable/explosive limit: 2.2 %
Vapor pressure	73.0 mm Hg @ 20°C
Vapor density	Not available.
Relative density	0.9 g/cm ³ @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	427°C/800.6°F
Decomposition Temperature	Not available.
Explosive properties	Not determined.
Oxidizing properties	Not available.

10. Stability and reactivity

Reactivity	The following materials may react with the product: Strong oxidizing agents.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	There are no known reactivity hazards associated with this product.
Conditions to avoid	Avoid heat, flames and other sources of ignition.
Materials to avoid	Acids. Strong oxidizing agents.
Hazardous decomposition products	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.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Irritating to skin.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Slightly irritating.
<u>Respiratory sensitization</u>	
Respiratory sensitization	Based on available data the classification criteria are not met.

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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 A single exposure may cause the following adverse effects: May cause drowsiness or dizziness.

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.

Eye contact Irritating and may cause redness and pain.

Route of exposure Inhalation Skin and/or eye contact

Toxicological Information on ingredients.

N,N-DIMETHYL-PARA-TOLUIDINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 139.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 3.19

Skin corrosion/irritation

Animal data Method: OECD 404, Rabbit Moderately irritating.

Serious eye damage/irritation

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Serious eye damage/irritation	Method: OECD 405, Rabbit Moderately irritating.
<u>Skin sensitization</u>	
Skin sensitization	Not sensitizing.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Ames test This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - LOEL 72.977 mg/kg/day,, Rat F2
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Not available.

12. Ecological information

Toxicity	No information available.
<u>Bioaccumulative potential</u>	
Partition coefficient	Not determined.
<u>Other adverse effects</u>	
Other adverse effects	None known.

13. Disposal considerations

Waste treatment methods

General information	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.
Disposal methods	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

<u>UN Number</u>	
UN No. (IMDG)	1173
UN No. (ICAO)	1173
UN No. (DOT)	UN1173
<u>UN proper shipping name</u>	
Proper shipping name (IMDG)	ETHYL ACETATE

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Proper shipping name (ICAO) ETHYL ACETATE

Proper shipping name (DOT) ETHYL ACETATE

Transport hazard class(es)

DOT hazard class 3

DOT hazard label 3

IMDG Class 3

ICAO class/division 3

Transport labels



DOT transport labels



Packing group

IMDG packing group II

ICAO packing group II

DOT packing group II

Environmental hazards

Environmentally Hazardous Substance

No.

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)

The following ingredients are listed:

ETHYL ACETATE

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
Fire

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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N,N-DIMETHYL-PARA-TOLUIDINE

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

Flam. Liq. = Flammable liquid
Eye Irrit. = Eye irritation
Skin Irrit. = Skin irritation
STOT SE = Specific target organ toxicity-single exposure
Asp. Tox. = Aspiration hazard

Revision date

10/15/2020

Revision

4

Supersedes date

10/23/2018

Hazard statements in full

H225 Highly flammable liquid and vapor.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

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.