

# Permabond®

## Engineering Adhesives

### SAFETY DATA SHEET

#### Permabond MS359A Grey

#### 1. Identification

##### Product identifier

**Product name** Permabond MS359A Grey

##### 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** Eye Irrit. 2A - H319 Skin Sens. 1 - H317

##### Label elements

##### Hazard symbols



**Signal word** Warning

**Hazard statements** H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.

**Precautionary statements** P264 Wash contaminated skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/ attention.  
Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

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**Contains** PENTAMETHYL PIPERIDYL SEBACATE

### 3. Composition/information on ingredients

#### Mixtures

<b>3-(TRIMETHOXYSILYL)PROPYLAMINE</b>	<b>1-5%</b>
CAS number: 13822-56-5	

#### Classification

Skin Irrit. 2 - H315  
Eye Dam. 1 - H318

<b>PENTAMETHYL PIPERIDYL SEBACATE</b>	<b>&lt;1%</b>
CAS number: 1065336-91-5	

CAS number: 1065336-91-5

#### Classification

Skin Sens. 1 - H317  
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

<b>Inhalation</b>	Move the exposed person to fresh air. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Do not induce vomiting. Get medical attention.
<b>Skin Contact</b>	Wash skin thoroughly with soap and water. If symptoms develop, obtain medical attention
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin.
<b>Eye contact</b>	Causes serious eye irritation.

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

**Notes for the doctor** No specific recommendations. Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Foam, carbon dioxide or dry powder.

**Unsuitable extinguishing media** Water.

#### 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

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**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 and eyes. Avoid inhalation of vapors and spray/mists. Wash hands thoroughly after handling. Keep container tightly sealed when not in use.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in closed original container at temperatures between 44°F and 77°F. Never return unused material to storage receptacle.

#### Specific end uses(s)

**Usage description** Adhesive. Sealant.

### 8. Exposure controls/Personal protection

#### Exposure controls

**Appropriate engineering controls** No specific ventilation requirements. Use positive down draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentrations below established exposure limits.

**Eye/face protection** Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for slashing or spraying exists.

**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.

**Respiratory protection** 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** Grey.

**Odor** Characteristic.

**Odor threshold** Not available.

**pH** Not relevant.

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<b>Melting point</b>	Not available.
<b>Initial boiling point and range</b>	Not applicable.
<b>Flash point</b>	>100°C
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.5
<b>Solubility(ies)</b>	Slightly soluble in water. Miscible with the following materials: acetone
<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	≈17500 mPa s @ 23°C
<b>Oxidizing properties</b>	Not available.
<b>Other information</b>	Not relevant.

### 10. Stability and reactivity

<b>Reactivity</b>	The following materials may react with the product: Strong oxidizing agents. Strong reducing agents. Strong acids. Amines. Peroxides.
<b>Stability</b>	Stable at normal ambient temperatures.
<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>Hazardous decomposition products</b>	Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

### 11. Toxicological information

#### Information on toxicological effects

<b>Toxicological effects</b>	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.
<b><u>Skin corrosion/irritation</u></b>	
<b>Skin corrosion/irritation</b>	Based on available data the classification criteria are not met.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
<b><u>Respiratory sensitization</u></b>	

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<b>Respiratory sensitization</b>	Based on available data the classification criteria are not met.
<u><b>Skin sensitization</b></u>	
<b>Skin sensitization</b>	May cause sensitisation by skin contact.
<u><b>Germ cell mutagenicity</b></u>	
<b>Genotoxicity - in vitro</b>	Based on available data the classification criteria are not met.
<b>Genotoxicity - in vivo</b>	Based on available data the classification criteria are not met.
<u><b>Carcinogenicity</b></u>	
<b>Carcinogenicity</b>	Does not contain any substances known to be carcinogenic.
<u><b>Reproductive toxicity</b></u>	
<b>Reproductive toxicity - fertility</b>	Based on available data the classification criteria are not met.
<b>Reproductive toxicity - development</b>	Does not contain any substances known to be toxic to reproduction.
<u><b>Specific target organ toxicity - single exposure</b></u>	
<b>STOT - single exposure</b>	Based on available data the classification criteria are not met.
<u><b>Specific target organ toxicity - repeated exposure</b></u>	
<b>STOT - repeated exposure</b>	Based on available data the classification criteria are not met.
<u><b>Aspiration hazard</b></u>	
<b>Aspiration hazard</b>	Based on available data the classification criteria are not met.
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<b>Inhalation</b>	May cause irritation.
<b>Ingestion</b>	No harmful effects expected from quantities likely to be ingested by accident.
<b>Skin Contact</b>	Prolonged and frequent contact may cause redness and irritation.
<b>Eye contact</b>	Causes serious eye irritation.

### Toxicological information on ingredients.

#### 3-(TRIMETHOXYSILYL)PROPYLAMINE

##### Skin corrosion/irritation

**Animal data** Irritating.

##### Serious eye damage/irritation

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

##### Skin sensitization

**Skin sensitization** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing.

##### Germ cell mutagenicity

**Genotoxicity - in vitro** Chromosome aberration: Negative.

##### Reproductive toxicity

**Reproductive toxicity - development** Developmental toxicity: - NOAEL: 100 mg/kg, Oral, Rat

##### Specific target organ toxicity - repeated exposure

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**STOT - repeated exposure** NOAEL 200 mg/kg, Oral, Rat LOAEL 600 mg/kg, Oral, Rat LOAEC 0.147 mg/l, Inhalation, Rat

**Target organs** Liver Respiratory system, lungs

### PENTAMETHYL PIPERIDYL SEBACATE

#### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 3,230.0

**Species** Rat

#### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 3,170.0

**Species** Rat

#### Acute toxicity - inhalation

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

#### Skin corrosion/irritation

**Skin corrosion/irritation** Not irritating.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Not irritating.

#### Skin sensitization

**Skin sensitization** Guinea pig maximization test (GPMT) - Guinea pig: Sensitizing.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Gene mutation: Negative.

**Genotoxicity - in vivo** Chromosome aberration: Negative.

#### Carcinogenicity

**Carcinogenicity** No information available.

#### Reproductive toxicity

**Reproductive toxicity - fertility** One-generation study - NOAEL 30 mg/kg/day, Oral, Rat F1

**Reproductive toxicity - development** No data available.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** No information available.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** No information available.

#### Aspiration hazard

**Aspiration hazard** Not available.

## 12. Ecological information

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**Ecotoxicity** There are no data on the ecotoxicity of this product.

**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 methods** Dispose of according to Federal, State and local governmental regulations.

### 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

**UN Number**

**UN No. (International)** Not applicable.

**UN No. (DOT)** Not applicable.

**UN proper shipping name**

**Proper shipping name (International)** Not applicable.

**Proper shipping name (DOT)** Not applicable.

**Transport hazard class(es)**

**Transport Labels (International)** No transport warning sign required.

**DOT transport labels**

No transport warning sign required.

**Packing group**

**Packing group (International)** Not applicable.

**DOT packing group** Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

No.

**Special precautions for user**

Not applicable.

**DOT reportable quantity** Not applicable.

**DOT TIH Zone** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

### 15. Regulatory information

**US Federal Regulations**

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### 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

### 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

<b>Classification abbreviations and acronyms</b>	Eye Irrit. = Eye irritation
<b>Revision date</b>	12/23/2021
<b>Revision</b>	3
<b>Supersedes date</b>	1/31/2018
<b>Hazard statements in full</b>	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.

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.