SECTION 1: Identification

1.1. Product identifier
Product name: Penebar™ Primer
Product code: Not available

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Water-based adhesive/Surface primer

1.3. Details of the supplier of the safety data sheet
Penetron International, Ltd.
45 Research Way, Suite 203
East Setauket, New York 11733 - USA
T +1 (631) 941-9700
info@penetron.com - penetron.com

1.4. Emergency telephone number
Emergency number: CHEMTREC: US and Canada: 1-800-424-9300; International +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Repr. 2

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US): GHS08
Signal word (GHS-US): Warning
Hazard statements (GHS-US): Suspected of damaging fertility or the unborn child.
Precautionary statements (GHS-US): Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards
No additional information available.

2.4. Unknown acute toxicity (GHS US)
Not applicable.

SECTION 3: Composition/Information on ingredients

3.1. Substance
Not applicable.

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monomethyl ether</td>
<td>(CAS No) 111-77-3</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.
First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid measures after ingestion: If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: May cause respiratory tract irritation.

Symptoms/injuries after skin contact: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Advice for firefighters

Protection during firefighting: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment: Dike to collect large liquid spills. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Scoop up material and place in a disposal container. After cleaning, flush traces away with water. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep out of the reach of children. Keep container tightly closed. Store at temperatures between 10° to 32°C (50° to 90°F). The expected shelf life is 12 months, but after prolonged storage the resin may settle slightly and require agitation to redisperse.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monomethyl ether (111-77-3)</td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Wear suitable gloves.

Eye protection: Safety glasses or goggles are recommended when using product.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: No data available

Color: Orange

Odor: No data available

Odor threshold: No data available

pH: No data available

Melting point: No data available

Freezing point: No data available

Boiling point: 212 °F

Flash point: No data available

Relative evaporation rate (butyl acetate=1): Slower than ether

Flammability (solid, gas): Not flammable

Explosion limits: No data available

 Explosive properties: No data available

Oxidizing properties: No data available

Vapor pressure: No data available

Relative density: No data available

Relative vapor density at 20 °C: Heavier than air

Solubility: No data available

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

9.2. Other information

Volatile weight: 34 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Heat. Incompatible materials.
10.5. Incompatible materials
Strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
: Not classified

Penebar™ Primer

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>&gt; 20 mg/l/4h</td>
</tr>
</tbody>
</table>

Diethylene glycol monomethyl ether (111-77-3)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>4 ml/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>650 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
: Based on available data, the classification criteria are not met.

Serious eye damage/irritation
: Based on available data, the classification criteria are not met.

Respiratory or skin sensitization
: Based on available data, the classification criteria are not met.

Germ cell mutagenicity
: Based on available data, the classification criteria are not met.

Carcinogenicity
: Based on available data, the classification criteria are not met.

Reproductive toxicity
: Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure)
: Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)
: Based on available data, the classification criteria are not met.

Aspiration hazard
: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation
: May cause respiratory tract irritation.

Symptoms/injuries after skin contact
: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact
: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/injuries after ingestion
: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general
: May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Penebar™ Primer

| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

Penebar™ Primer

| Bioaccumulative potential | Not established. |

12.4. Mobility in soil
No additional information available.

12.5. Other adverse effects
Effect on the global warming
: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations
: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
SECTION 14: Transport information

14.1. Department of Transportation (DOT)
In accordance with DOT
Not regulated for transport

14.2. Additional information
Other information: No supplementary information available.
Special transport precautions: Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

| Mixture, 3(2H)-isothiazolone, 5-chloro-2-methyl- with 2-methyl-3(2H)-isothiazolone | CAS No 55965-84-9 |

15.2. US State regulations

<table>
<thead>
<tr>
<th>Penebar™ Primer</th>
<th>State or local regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This product contains a chemical known to the State of California to cause cancer.</td>
</tr>
</tbody>
</table>

SECTION 16: Other information

Date of issue: 10/15/2004
Revision date: 02/09/2016
Other information: None

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of this information for the user’s own particular use.