1. IDENTIFICATION

Product identifier
Product Name MEDIUM STRENGTH THREADLOCKER BLUE  250 ML

Other means of identification
Product Code 24225
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Sealant
Uses advised against No information available

Details of the supplier of the safety data sheet
Manufacturer Address
ITW Permatex
10 Columbus Blvd.
Hartford, CT 06106 USA
Distributor
ITW Permatex Canada
35 Brownridge Road, Unit 1
Halton Hills, ON Canada L7G 0C6
Telephone: (800) 924-6994

Company Phone Number 1-87-Permatex
(877) 376-2839
24 Hour Emergency Phone Number
Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral Category 4
Acute toxicity - Dermal Category 4
Acute toxicity - Inhalation (Dusts/Mists) Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Carcinogenicity Category 2
Specific target organ toxicity (repeated exposure) Category 2

Label elements

Emergency Overview

Warning
Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Not applicable.

Unknown acute toxicity
96.726% of the mixture consists of ingredient(s) of unknown toxicity
**4. FIRST AID MEASURES**

**Description of first aid measures**

**General advice**
Get medical advice/attention if you feel unwell.

**Eye contact**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin contact**
IF ON SKIN:. Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.

**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

**Ingestion**
IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

**Self-protection of the first aider**
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

**Symptoms**
See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

---

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**
Carbon dioxide (CO2), Dry chemical, Foam

**Unsuitable extinguishing media**
None.

**Specific hazards arising from the chemical**
None in particular.

**Explosion data**

<table>
<thead>
<tr>
<th>Sensitivity to Mechanical Impact</th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity to Static Discharge</td>
<td>None.</td>
</tr>
</tbody>
</table>

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

---

**6. ACCIDENTAL RELEASE MEASURES**
Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions
Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Prevention of secondary hazards
Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials
Strong oxidizing agents, Peroxides, Reducing agent

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 15 mg/m³</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td>(vacated) TWA: 10 mg/m³ total dust</td>
<td></td>
</tr>
</tbody>
</table>

NIOSH IDLH  Immediately Dangerous to Life or Health

Other Information
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.
9. PHYSICAL AND CHEMICAL PROPERTIES

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Does not apply</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt; 149 °C / 300 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93 °C / &gt; 199 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>n/d</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;1</td>
<td>Air = 1</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.00-1.15</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Excessive heat.

Incompatible materials
Strong oxidizing agents, Peroxides, Reducing agent
**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Inhalation**
May cause irritation of respiratory tract.

**Eye contact**
Contact with eyes may cause irritation.

**Skin contact**
May cause skin irritation and/or dermatitis.

**Ingestion**
Ingestion may cause irritation to mucous membranes.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE 80-15-9</td>
<td>382 mg/kg (Rat)</td>
<td>0.126 mL/kg (Rabbit)</td>
<td>220 ppm (Rat) 4h</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>&gt;10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms**
No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**
No information available.

**Germ cell mutagenicity**
No information available.

**Carcinogenicity**
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SACCHARIN 81-07-2</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td></td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

**IARC (International Agency for Research on Cancer)**
Group 2B - Possibly Carcinogenic to Humans
Not classifiable as a human carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**
X - Present

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document.

- ATEmix (oral) 618 mg/kg
- ATEmix (dermal) 1778 mg/kg
- ATEmix (inhalation-dust/mist) 0.8 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

None known

95.986% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE 80-15-9</td>
<td>-</td>
<td>3.9: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>7: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>SACCHARIN 81-07-2</td>
<td>-</td>
<td>18300: 96 h Pimephales promelas mg/L LC50</td>
<td>-</td>
</tr>
</tbody>
</table>
Persistence and degradability
No information available.

Bioaccumulation
No information available.

Mobility
No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Do not reuse container.

US EPA Waste Number
Not applicable

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>U096</td>
</tr>
<tr>
<td>80-15-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE</td>
<td>Toxic</td>
</tr>
<tr>
<td>80-15-9</td>
<td>Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
Proper shipping name: Not regulated

IATA
Proper shipping name: Not regulated

IMDG
Proper shipping name: Not regulated

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>
Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9</td>
<td>1.0</td>
</tr>
<tr>
<td>SACCHARIN - 81-07-2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories
- Acute health hazard: Yes
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9</td>
<td>10 lb</td>
<td>-</td>
<td>RQ 10 lb final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITANIUM DIOXIDE - 13463-67-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>SACCHARIN - 81-07-2</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1,4-NAPHTHOQUINONE 130-15-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable
Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet