1. IDENTIFICATION

Product identifier
Product Name: HIGH TEMPERATURE THREAD SEALANT 50ML

Other means of identification
Product Code: 59235
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: 1-877-Permatex
(877) 376-2839

24 Hour Emergency Phone Number: Chem-Tel: 800-255-3924
International Emergency: 00+1+ 813-248-0585

2. HAZARDS IDENTIFICATION

Classification

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2</td>
<td>Skin corrosion/irritation</td>
</tr>
<tr>
<td>Category 2A</td>
<td>Serious eye damage/eye irritation</td>
</tr>
<tr>
<td>Category 2</td>
<td>Carcinogenicity</td>
</tr>
<tr>
<td>Category 2</td>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Warning
Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYGLYCOL DIMETHACRYLATE</td>
<td>25852-47-5</td>
<td>10 - 30</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>SILICA, MICA</td>
<td>12001-26-2</td>
<td>10 - 30</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>POLYETHYLENE GLYCOL ESTER</td>
<td>18268-70-7</td>
<td>5 - 10</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>OCTANOL</td>
<td>111-87-5</td>
<td>5 - 10</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>POLYTETRAFLUOROETHYLENE</td>
<td>9002-84-0</td>
<td>3 - 7</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>1 - 5</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>PROPYLENE GLYCOL</td>
<td>57-55-6</td>
<td>1 - 5</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>SACCHARIN</td>
<td>81-07-2</td>
<td>1 - 5</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE</td>
<td>80-15-9</td>
<td>1 - 5</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.
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
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

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

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. Amines.

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>SILICA, MICA</td>
<td>TWA: 3 mg/m³ respirable fraction (vacated) TWA: 3 mg/m³ respirable dust &lt;1% Crystalline silica TWA: 20 mppcf &lt;1% Crystalline silica</td>
<td></td>
<td>IDLH: 1500 mg/m³ containing &lt;1% Quartz respirable dust</td>
</tr>
<tr>
<td>12001-26-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>TWA: 10 mg/m³ (vacated) TWA: 15 mg/m³ total dust</td>
<td>TWA: 10 mg/m³ total dust</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td>13463-67-7</td>
<td></td>
<td></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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
Paste

Appearance
White
**59235 - HIGH TEMPERATURE THREAD SEALANT**  
**50ML**

**Revision Date** 03-Feb-2015

- **Odor**: Mild  
- **Odor threshold**: No information available

**Property** | **Values** | **Remarks • Method**
--- | --- | ---
**pH** | Does not apply |  
**Melting point / freezing point** | No information available |  
**Boiling point / boiling range** | > 149 °C / 300 °F |  
**Flash point** | > 93 °C / > 199 °F |  
**Evaporation rate** | No information available |  
**Flammability (solid, gas)** | No information available |  
**Flammability Limit in Air**
- Upper flammability limit: No information available
- Lower flammability limit: No information available

- **Vapor pressure**: n/d  
- **Vapor density**: >1  
- **Relative density**: 1.16-1.26  
- **Water solubility**: Insoluble

**Solubility in other solvents** | No information available |  
**Partition coefficient** | No information available |  
**Autoignition temperature** | No information available |  
**Decomposition temperature** | No information available |  
**Kinematic viscosity** | No information available |  
**Dynamic viscosity** | No information available |  
**Explosive properties** | No information available |  
**Oxidizing properties** | No information available |  

**Other Information**

- **Softening point**: No information available
- **Molecular weight**: No information available
- **VOC Content (%)**: 2.8%; 33.9 g/L
- **Density**: No information available
- **Bulk density**: No information available

### 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, Amines

**Hazardous Decomposition Products**
Carbon oxides

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

- **Inhalation**: May be harmful if inhaled.
Eye contact  May cause redness and tearing of the eyes.

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>POLYETHYLENE GLYCOL ESTER 18268-70-7</td>
<td>= 18 g/kg (Rat)</td>
<td>&gt; 20 mL/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>OCTANOL 111-87-5</td>
<td>&gt; 3200 mg/kg (Rat)</td>
<td>&gt; 5000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PROPYLENE GLYCOL 57-55-6</td>
<td>= 20000 mg/kg (Rat)</td>
<td>= 20800 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<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) 4 h</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

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

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>POLYTETRAFLUOROETHYLENE 9002-84-0</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>
<tr>
<td>SACCHARIN 81-07-2</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

IAARC (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

Target Organ Effects  Lungs, Respiratory system.

Numerical measures of toxicity - Product Information

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

ATEmix (oral)  3936 mg/kg
ATEmix (dermal)  7529 mg/kg
ATEmix (inhalation-dust/mist)  13.1 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known
85.671% 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>OCTANOL 111-87-5</td>
<td>14: 48 h Desmodesmus subspicatus mg/L EC50 static</td>
<td>11.4 - 12.9: 96 h Pimephales promelas mg/L LC50 fish-through 17.68: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>15 - 26: 24 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>
### PROPYLENE GLYCOL

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTANOL</td>
<td>3.15</td>
</tr>
</tbody>
</table>

### SACCHARIN

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>81-07-2</td>
<td></td>
</tr>
</tbody>
</table>

### DIMETHYLBENZYL HYDROPEROXIDE

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-15-9</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 80-15-9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>U096</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 80-15-9</td>
<td>Toxic Ignitable</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**
- **Proper shipping name**: Not regulated

**TDG**
- **Proper shipping name**: Not regulated

**ICAO (air)**
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th></th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Does not comply</td>
<td>Complies</td>
<td>Does not comply</td>
<td>Does not comply</td>
<td>Complies</td>
<td>Complies</td>
<td>Does not comply</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: Yes
- 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>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 4.54 kg 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>SILICA, MICA 12001-26-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE 13463-67-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PROPYLENE GLYCOL 57-55-6</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE 80-15-9</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SACCHARIN 81-07-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>WATER 7732-18-5</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

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

NFPA

<table>
<thead>
<tr>
<th></th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA (National Fire Protection Association)</td>
<td>Health hazards</td>
<td>Flammability</td>
<td>Physical hazards</td>
<td>Personal protection</td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th></th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS (Hazardous Material Information System)</td>
<td>Health hazards</td>
<td>Flammability</td>
<td>Physical hazards</td>
<td>Personal protection</td>
</tr>
</tbody>
</table>

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