1. IDENTIFICATION

Product identifier
Product Name
ANAEROBIC FLANGE SEALANT 300ML

Other means of identification
Product Code
51580
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

E-mail address
mail@permatex.com

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>Hazard Class</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Dusts/Mists)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see supplemental first aid instructions on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation or rash occurs: Get medical advice/attention
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 you feel unwell
Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up

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

Hazards not otherwise classified (HNOC) 
Not applicable

Other Information
Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity 85.617 % of the mixture consists of ingredient(s) of unknown toxicity

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gel</td>
<td>Purple</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
</tr>
</tbody>
</table>

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
</table>

Page 2/9
### 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. Immediately call a POISON CENTER or doctor/physician.

**Skin contact**
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/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. Call a physician.

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

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. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Store locked up.

Incompatible materials
Strong oxidizing agents, Amines, Reactive metals

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>ACRYLIC ACID</td>
<td>TWA: 2 ppm S* (vacated)</td>
<td>TWA: 10 ppm (vacated) TWA: 30 mg/m³ (vacated) S*</td>
<td>TWA: 2 ppm TWA: 6 mg/m³</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. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

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>Physical state</td>
<td>Gel</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Purple</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No information available</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 / &gt;300 °F</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93 °C / &gt; 200 °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>No information available</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>&lt;5 mmHg @ 25°C</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Negligible</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, Amines, Reactive metals
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

**Inhalation**
Harmful by inhalation.

**Eye contact**
Risk of serious damage to eyes.

**Skin contact**
Contact causes severe skin irritation and possible burns.

**Ingestion**
Harmful if swallowed.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRYLIC ACID 79-10-7</td>
<td>= 193 mg/kg (Rat)</td>
<td>= 280 µL/kg (Rabbit)</td>
<td>= 11.1 mg/L (Rat) 1 h = 3.6 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE 868-77-9</td>
<td>= 5050 mg/kg (Rat)</td>
<td>&gt; 3000 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**

**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>ACRYLIC ACID 79-10-7</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**IARC (International Agency for Research on Cancer)**
Not classifiable as a human carcinogen

**Target Organ Effects**
Eyes, Respiratory system, Skin.

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

- ATEmix (oral) 786 mg/kg
- ATEmix (dermal) 1674 mg/kg
- ATEmix (inhalation-dust/mist) 1.6 mg/l

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
85.808% 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>ACRYLIC ACID 79-10-7</td>
<td>0.17: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.04: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>222: 96 h Brachydanio rerio mg/L LC50 semi-static</td>
<td>95: 48 h Daphnia magna mg/L EC50 270: 24 h Daphnia magna mg/L LC50 Static</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE 868-77-9</td>
<td>-</td>
<td>213 - 242: 96 h Pimephales promelas mg/L LC50 flow-through 227: 96 h Pimephales promelas mg/L LC50</td>
<td>-</td>
</tr>
<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>
</tbody>
</table>
Persistence and degradability
No information available.

Bioaccumulation
No information available.

Mobility
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRYLIC ACID 79-10-7</td>
<td>0.38 - 0.46</td>
</tr>
<tr>
<td>2-HYDROXYETHYL METHACRYLATE 868-77-9</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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>ACRYLIC ACID 79-10-7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>U008</td>
</tr>
<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</td>
</tr>
<tr>
<td></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>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Not Listed.</td>
</tr>
<tr>
<td>ENCS</td>
<td>Complies</td>
</tr>
</tbody>
</table>
IECSC  Complies
KECL  Complies
PICCS  Complies
AICS  Complies

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>ACRYLIC ACID - 79-10-7</td>
<td>1.0</td>
</tr>
<tr>
<td>DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9</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>ACRYLIC ACID - 79-10-7</td>
<td>5000 lb</td>
<td>-</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
<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 does not contain any Proposition 65 chemicals

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>ACRYLIC ACID - 79-10-7</td>
<td>X</td>
<td>X</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></td>
</tr>
<tr>
<td>PROPYLENE GLYCOL - 57-55-6</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health hazards</td>
<td>Flammability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)

Revision Date 08-Jun-2015

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