1. IDENTIFICATION

Product identifier

Product code: P1813
Product Name: POLOXAMER 182

Other means of identification

Synonyms: Pluronic L62; Methyl-oxirane polymer with oxirane; Poly(oxyethylene)-Poly(oxypropylene)-poly(oxyethylene polymer; Oxirane, 2-methyl-, polymer with oxirane

CAS #: 9003-11-6
RTECS #: MD0907950
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against: No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000.

Order Online At: https://www.spectrumchemical.com
Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)</td>
<td>9003-11-6</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms: May cause eye/skin/respiratory tract irritation. May cause hypermotility, diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides

Specific hazards: May be combustible at high temperatures

Container explosion may occur under fire conditions or when heated

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with
flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

**Special Protective Equipment 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. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.

#### Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

#### Methods for containment
Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

#### Methods for cleaning up
Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical Measures/Precautions:**
Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials.

**Safe Handling Advice**
Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatible Materials:**

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

### National occupational exposure limits

#### United States

<table>
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<tr>
<th>Components</th>
<th>CAS-No.</th>
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<th>NIOSH</th>
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<th>AIHA WHEEL</th>
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**Product code:** P1813  
**Product name:** POLOXAMER 182
contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)

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<th>Mexico</th>
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<td>9003-11-6</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:** Goggles

**Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.

**Respiratory protection:** Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state:** Liquid

**Odor:** Polyl.

**Molecular/Formula weight:** 2500 g/mole

**Flash Point Tested according to:** Not available

**Upper Explosion Limit (%):**

**Appearance:** No information available.

**Taste:** No information available.

**Flammability:** No information available

**Formula:** HO(C2H4O)a(C3H6O)b(C2H4O)aH

**Color:** No information available.

**Autoignition Temperature (°C/°F):** No information available

**Flashpoint (°C/°F):** >215 °C/>419 °F

**Lower Explosion Limit (%):** No information available

**Product code:** P1813 **Product name:** POLOXAMER 182
10. STABILITY AND REACTIVITY

Reactivity
No information available

Chemical stability
Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur


Hazardous decomposition products: Carbon monoxide.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Eyes. Skin.

Acute Toxicity

Component Information

Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane) - 9003-11-6

<table>
<thead>
<tr>
<th>Component</th>
<th>Route</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Poloxamer 182</td>
<td>LD50/oral/rat</td>
<td>5700 mg/kg (RTECS); 16g/kg(LOLI)</td>
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<tr>
<td>Poloxamer 182</td>
<td>LD50/oral/mouse</td>
<td>3 gm/kg</td>
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<tr>
<td>Poloxamer 182</td>
<td>LD50/dermal/rabbit</td>
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</table>

Product code: P1813
Product name: POLOXAMER 182
**Product Information**

**LD50/oral/rat =**  
VALUE - Acute Tox Oral = 5700 mg/kg

**LD50/oral/mouse =**  
Value - Acute Tox Oral = 3 g/kg

**LD50/dermal/rabbit**  
VALUE - Acute Tox Dermal = No information available

**LD50/dermal/rat**  
VALUE - Acute Tox Dermal = No information available

**LC50/inhalation/rat**  
VALUE - Vapor = No information available  
VALUE - Gas = No information available  
VALUE - Dust/Mist = 320 mg/m³ (4-hr.)

**LC50/Inhalation/mouse**  
VALUE - Vapor = No information available  
VALUE - Gas = No information available  
VALUE - Dust/Mist = No information available

**Symptoms**

**Skin Contact:**  
May cause skin irritation.

**Eye Contact:**  
May cause slight or mild eye irritation. May cause transient eye irritation.

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

**Ingestion**  
May cause digestive (gastrointestinal) tract irritation. May cause hypermotility, diarrhea. May affect behavior/central nervous system (somnolence).

**Aspiration hazard**  
No information available.

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

**Chronic Toxicity**  
No information available.

**Sensitization:**  
No information available.

**Mutagenic Effects:**  
No information available

**Carcinogenic effects:**  
Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
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</thead>
<tbody>
<tr>
<td>Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)</td>
<td>9003-11-6</td>
<td>Not listed</td>
<td>Not listed</td>
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</tbody>
</table>

**Product code:** P1813  
**Product name:** POLOXAMER 182
ACGIH (American Conference of Governmental Industrial Hygienists)  
IARC (International Agency for Research on Cancer)  
NTP (National Toxicology Program)  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity**  
No data is available

**Reproductive Effects:** No information available  
**Developmental Effects:** No information available  
**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

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

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

**Target Organs:**  
No information available.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Ecotoxicity effects:**  
No data available.

**Persistence and degradability:**  
No information available

**Bioaccumulative potential:**  
No information available.

**Mobility:**  
No information available.

### 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
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<th></th>
</tr>
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<tbody>
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<td>None</td>
<td>None</td>
<td>None</td>
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</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** None

**Product code:** P1813  
**Product name:** POLOXAMER 182
ERG No: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available

TDG (Canada)
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant: No Information available

ADR
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IMO / IMDG
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

RID
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ICAO
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA
UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available

ERG Code: No information available
Special Provisions: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
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<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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</thead>
<tbody>
<tr>
<td>Poloxamer 182 (may contain trace amounts)</td>
<td>9003-11-6</td>
<td>Present XU</td>
<td>Present KE-24574</td>
<td>Present</td>
<td>Present (7)-1246</td>
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<td>Present</td>
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Product code: P1813  Product name: POLOXAMER 182
of Ethylene oxide, Propylene oxide, and 1,4-dioxane)

**U.S. Regulations**

Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)

**FDA - Direct Food Additives**

21 CFR 173.340  21 CFR 172.808

**FDA - 21 CFR - Total Food Additives**

Present

172.810

178.1010


**Chemicals Known to the State of California to Cause Cancer:**

WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
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</thead>
<tbody>
<tr>
<td>Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)</td>
<td>9003-11-6</td>
<td>Ethylene Oxide; Propylene Oxide; 1,4-Dioxane</td>
<td>Ethylene oxide</td>
<td>Ethylene oxide</td>
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</table>

**CERCLA/SARA**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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</thead>
<tbody>
<tr>
<td>Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)</td>
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<td>None</td>
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**U.S. TSCA**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting Reporting</th>
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<tbody>
<tr>
<td>Poloxamer 182 (may contain trace amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)</td>
<td>9003-11-6</td>
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**Canada**

**WHMIS hazard class:**

Non-controlled

**Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

**Inventory**

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**Product code:** P1813  **Product name:** POLOXAMER 182
amounts of Ethylene oxide, Propylene oxide, and 1,4-dioxane)

<table>
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<th>Components</th>
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**EU Classification**

**R-phrase(s)**
not determined (not applicable)

**S-phrase(s)**
none

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<tr>
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<th>Safety Phrases</th>
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The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
None.

### 16. OTHER INFORMATION

**Preparation Date:** 7/22/2016
**Revision Date:** 7/22/2016
**Prepared by:** Sonia Owen

**Disclaimer:**
All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**Product code:** P1813  **Product name:** POLOXAMER 182
End of Safety Data Sheet