

SAFETY DATA SHEET

Preparation Date: 3/11/2015

Revision Date: 10/09/2018

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: P1168
Product Name: POLOXAMER 124

Other means of identification

Synonyms: Pluronic L44; Methyl-oxirane polymer with oxirane
Polyoxyethylene-Polyoxypropylene Block Copolymer; Poly(Ethylene
oxide-co-Polypropylene oxide), Block; Block Copolymer of Ethylene
Oxide and Propylene Oxide; Ethylene oxide/Polypropylene oxide
copolymer;

CAS #: 9003-11-6 (or alternate CAS number 106392-12-5)
RTECS # MD0907950 (for CAS number 9003-11-6); TP6493001 (for CAS number
106392-12-5)

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 according to 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

Product code: P1168

Product name: POLOXAMER 124

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Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Poloxamer 124	9003-11-6	>99
Propylene Oxide	75-56-9	<0.1
Ethylene oxide	75-21-8	<0.1
1,4-Dioxane	123-91-1	<0.1

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 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 Monoxide, Carbon Dioxide.

Specific hazards: May be combustible at high temperatures. May be ignited by heat, sparks or flames. Containers may explode when

heated.

Special Protective Actions for Firefighters

Specific Methods:

For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

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. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

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), then place in a suitable chemical waste container.

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. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Store away from incompatible materials. Store at room temperature in the original container. Keep container tightly closed in a dry and well-ventilated place.

Incompatible Materials:

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
Poloxamer 124	9003-11-6	None	None	None	None
Propylene Oxide	75-56-9	100 ppm TWA 240 mg/m ³ TWA	None	2 ppm TWA	None

Ethylene oxide	75-21-8	1 ppm TWA 5 ppm STEL	0.1 ppm TWA 0.18 mg/m ³ TWA 5 ppm Ceiling 10 min/day 9 mg/m ³ Ceiling 10 min/day	1 ppm TWA	None
1,4-Dioxane	123-91-1	100 ppm TWA 360 mg/m ³ TWA	1 ppm Ceiling 3.6 mg/m ³ Ceiling	20 ppm TWA	Not determined

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Poloxamer 124	9003-11-6	None	None	None	None
Propylene Oxide	75-56-9	2 ppm TWA 4.7 mg/m ³ TWA	2 ppm TWA	None	None
Ethylene oxide	75-21-8	1 ppm TWA 1.8 mg/m ³ TWA	0.1 ppm TWA 1 ppm STEL	1 ppm TWA 1.8 mg/m ³ TWA 10 ppm STEL 18 mg/m ³ STEL	1 ppm TWA EV 1.8 mg/m ³ TWA EV
1,4-Dioxane	123-91-1	20 ppm TWA 72 mg/m ³ TWA	20 ppm TWA	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Poloxamer 124	9003-11-6	None	None
Propylene Oxide	75-56-9	20 ppm TWA 48 mg/m ³ TWA	20 ppm TWA 50 mg/m ³ TWA
Ethylene oxide	75-21-8	1 ppm TWA 1.8 mg/m ³ TWA	1 ppm TWA 2 mg/m ³ TWA
1,4-Dioxane	123-91-1	10 ppm TWA 36 mg/m ³ TWA	25 ppm TWA 90 mg/m ³ TWA 100 ppm STEL 360 mg/m ³ STEL

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	Appearance: Hazy.	Color: No information available.
Odor: No information available.	Taste No information available.	Formula: HO(C ₂ H ₄ O) _a (C ₃ H ₆ O) _b (C ₂ H ₄ O) _a H
Molecular/Formula weight (g/mole): No information available	Flammability: No information available	Flash point (°C): 240
Flashpoint (°C/°F): 240°C/464°F	Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available
Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): 16°C/60.8°F
Decomposition temperature(°C/°F): No information available	Boiling point/range(°C/°F): No information available	Bulk density: No information available
Density (g/cm³): 1.05	Specific gravity: No information available	pH: 5.0-7.5 (pH of a 5% solution)
Vapor pressure @ 20°C (kPa): No information available	Evaporation rate: No information available	Vapor density: No information available
VOC content (g/L): No information available	Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available
Viscosity: No information available	Miscibility: No information available	Solubility: Soluble in Water

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

Conditions to avoid: Heat. Ignition sources.

Incompatible Materials: No information available

Hazardous decomposition products: Carbon monoxide. Carbon dioxide.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product code: P1168

Product name: POLOXAMER 124

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Principal Routes of Exposure:

Ingestion. Inhalation. Skin.

Acute Toxicity**Component Information**

Poloxamer 124	
CAS-No.	9003-11-6
LD50/oral/rat = 5700 mg/kg Oral LD50 Rat; 16 g/kg Oral LD50 Rat	
LD50/oral/mouse = 3000 mg/kg	
LD50/dermal/rabbit = No information available	
LD50/dermal/rat = No information available	
LC50/inhalation/rat = 320 mg/m ³ Inhalation LC50 Rat 4 h	
LC50/inhalation/mouse = No information available	
Other LD50 or LC50information = No information available	
Propylene Oxide	
CAS-No.	75-56-9
LD50/oral/rat = 520 mg/kg Oral LD50 Rat	
LD50/oral/mouse = No information available	
LD50/dermal/rabbit = 1244 mg/kg Dermal LD50 Rabbit	
LD50/dermal/rat = No information available	
LC50/inhalation/rat = 4000 ppm Inhalation LC50 Rat 4 h; = 0.948 mg/L Inhalation LC50 Rat 4 h	
LC50/inhalation/mouse = No information available	
Other LD50 or LC50information = No information available	
Ethylene oxide	
CAS-No.	75-21-8
LD50/oral/rat = 72 mg/kg Oral LD50 Rat	
LD50/oral/mouse = No information available	
LD50/dermal/rabbit = No information available	
LD50/dermal/rat = No information available	
LC50/inhalation/rat = 800 ppm Inhalation LC50 Rat 4 h	
LC50/inhalation/mouse = No information available	
Other LD50 or LC50information = No information available	
1,4-Dioxane	
CAS-No.	123-91-1
LD50/oral/rat = 5170 mg/kg Oral LD50 Rat; 4200 mg/kg Oral LD50 Rat	
LD50/oral/mouse = No information available	
LD50/dermal/rabbit = 7600 µL/kg Dermal LD50Rabbit	
LD50/dermal/rat = No information available	
LC50/inhalation/rat = 46 g/m ³ Inhalation LC50 Rat 2 h	
LC50/inhalation/mouse = No information available	
Other LD50 or LC50information = No information available	

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 5000 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 3000 mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

Product code: P1168

Product name: POLOXAMER 124

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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:** Contact with eyes may cause irritation.**Inhalation** This material is in the form of prills and is unlikely to cause respiratory tract irritation.**Ingestion** May cause hypermotility, diarrhea. May affect behavior/central nervous system (somnolence). May cause muscle weakness.**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.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Poloxamer 124	9003-11-6	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Propylene Oxide	75-56-9	Group 2B - Possibly carcinogenic to humans - Monograph 60 [1994] Supplement 7 [1987]	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Reasonably Anticipated To Be A Human Carcinogen	Present	Not listed	Not listed
Ethylene oxide	75-21-8	Group 1- Carcinogenic to humans - Monograph 100F [2012] Monograph 97 [2008] Monograph 60 [1994] overall evaluation upgraded from Group 2A to Group 1 based on mechanistic and other relevant data	A2 Suspected Human Carcinogen	Known Human Carcinogen	Present see 29 CFR 1910.1047	Not listed	Not listed

1,4-Dioxane	123-91-1	Group 2B - Possibly carcinogenic to humans - Monograph 71 [1999] Supplement 7 [1987] Monograph 11 [1976]	A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans	Reasonably Anticipated To Be A Human Carcinogen	Present	Not listed	Not listed
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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: Aquatic environment.

Propylene Oxide - 75-56-9
Freshwater Algae Data: 240 mg/L EC50 Pseudokirchneriella subcapitata 96 h
Freshwater Fish Species Data: 215 mg/L LC50 Lepomis macrochirus 96 h static 1
Water Flea Data: 350 mg/L EC50 Daphnia magna 48 h

Ethylene oxide - 75-21-8
Freshwater Fish Species Data: 73 - 96 mg/L LC50 Pimephales promelas 96 h 1
Water Flea Data: 137 - 300 mg/L LC50 Daphnia magna 48 h

1,4-Dioxane - 123-91-1
Freshwater Fish Species Data: 10000 mg/L LC50 Lepomis macrochirus 96 h static 1 10000 mg/L LC50 Lepomis macrochirus 96 h semi-static 1 9850 mg/L LC50 Pimephales promelas 96 h flow-through 1 10306 - 14742 mg/L LC50 Pimephales promelas 96 h static 1 9850 mg/L LC50 Pimephales promelas 96 h 1
Water Flea Data: 163 mg/L EC50 water flea 48 h

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

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Poloxamer 124	9003-11-6	None	None	None	None
Propylene Oxide	75-56-9	None	None	None	None
Ethylene oxide	75-21-8	None	None	None	U115 ignitable waste, toxic waste
1,4-Dioxane	123-91-1	None	None	None	U108

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: 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
Description: No information available

ADR

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

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Poloxamer 124</i>	9003-11-6	PresentACTIVE	Present KE-24574	Present	Present (7)-1246	Present	Present	Not present
<i>Propylene Oxide</i>	75-56-9	PresentACTIVE	Present KE-24565	Present	Present (2)-219	Present	Present	Present 200-879-2
<i>Ethylene oxide</i>	75-21-8	PresentACTIVE	Present KE-27537	Present	Present (2)-218	Present	Present	Present 200-849-9
<i>1,4-Dioxane</i>	123-91-1	PresentACTIVE	Present KE-10463	Present	Present (5)-839	Present	Present	Present 204-661-8

U.S. Regulations*Poloxamer 124*

FDA - Direct Food Additives 21 CFR 172.808 (condensates); 21 CFR 173.340
FDA - 21 CFR - Total Food Additives - List Sourced from EAFUS 172.808, 173.340, 176.210, 177.1210, 177.1680, 178.1010, 178.3570; Present (average molecular weight 14000; not regulated under 21 CFR); Present (average molecular weight 9760-13200; not regulated under 21 CFR); 172.810 (average molecular weight 3500-4125); 178.1010 (min average molecular weight1900)

Propylene Oxide

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1615
New Jersey (EHS) List: 1615 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
New Jersey TCPA - EHS: 7700lbTQ
Pennsylvania RTK: Environmental hazard
 Special hazardous substance
Pennsylvania RTK - Environmental Hazard List Present
Pennsylvania RTK - Special Hazardous Substances Present
Minnesota - Hazardous Substance List: Present
New York Release Reporting - List of Hazardous Substances:
 100 lb RQ
Louisiana Reportable Quantity List for Pollutants: Listed
California Directors List of Hazardous Substances: Present

FDA - Direct Food Additives 21 CFR 172.892 (<=25%)
FDA - 21 CFR - Total Food Additives - List Sourced from EAFUS 172.892, 175.105, 176.210

Ethylene oxide

Massachusetts RTK: Present
Massachusetts EHS: carcinogen; extraordinarily hazardous
New Jersey RTK Hazardous Substance List: 0882
New Jersey (EHS) List: 0882 500 lb TPQ

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

New Jersey TCPA - EHS: 2700lbTQ

Pennsylvania RTK: Environmental hazard

Special hazardous substance

Pennsylvania RTK - Environmental Hazard List Present

Pennsylvania RTK - Special Hazardous Substances Present

Michigan PSM HHC: = 5000 lb TQ

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

10 lb RQ

Louisiana Reportable Quantity List for Pollutants: Listed

California Directors List of Hazardous Substances: Present

FDA - 21 CFR - Total Food Additives 172.710, 172.808, 175.105, 176.180, 176.210, 177.2470, 178.3520

- List Sourced from EAFUS

1,4-Dioxane

Massachusetts RTK: Present

New Jersey RTK Hazardous Substance List: 0789

New Jersey (EHS) List: 0789 500 lb TPQ

New Jersey - Discharge Prevention - List of Hazardous Substances: Present

Pennsylvania RTK: Environmental hazard

Special hazardous substance

Pennsylvania RTK - Environmental Hazard List Present

Pennsylvania RTK - Special Hazardous Substances Present

Minnesota - Hazardous Substance List: Present

New York Release Reporting - List of Hazardous Substances:

100 lb RQ

1 lb RQ


Louisiana Reportable Quantity List for Pollutants: 100lbfinal RQ

45.4kgfinal RQ


California Directors List of Hazardous Substances: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

 WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

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

 WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Poloxamer 124	9003-11-6	Not Listed	Not Listed	Not Listed	ethylene oxide - present
Propylene Oxide	75-56-9	carcinogen	Not Listed	Not Listed	Not Listed
Ethylene oxide	75-21-8	carcinogen	Developmental toxicity	Male reproductive toxicity	female reproductive toxicity
1,4-Dioxane	123-91-1	carcinogen	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Poloxamer 124	9003-11-6	None	None	None	None	None
Propylene Oxide	75-56-9	100 lb final RQ 45.4 kg final RQ	100 lb EPCRA RQ	None	None	0.1 % de minimis concentration
Ethylene oxide	75-21-8	10 lb final RQ 4.54 kg final RQ	1000 lb TPQ 10 lb EPCRA RQ	None	None	0.1 % de minimis concentration
1,4-Dioxane	123-91-1	100 lb final RQ 45.4 kg final RQ	None	None	None	0.1 % de minimis concentration

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Poloxamer 124	9003-11-6	Not Applicable	Not Applicable
Propylene Oxide	75-56-9	Not Applicable	Not Applicable
Ethylene oxide	75-21-8	Not Applicable	10/04/1982 10/04/1992
1,4-Dioxane	123-91-1	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

Component
Propylene Oxide
75-56-9 (<0.1)

WHMIS 2015 Hazard Classification
Flammable liquids - Category 1: H224 Extremely flammable liquid and vapour.; Acute toxicity - Oral - Category 4: H302 Harmful if swallowed.; Acute toxicity - Dermal - Category 4: H312 Harmful in contact with skin.; Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation.; Carcinogenicity - Category 2: H351 Suspected of causing cancer.; Specific target organ toxicity - Single exposure - Category 3: H335 May cause respiratory irritation.

Ethylene oxide
75-21-8 (<0.1)

Flammable gases - Category 1: H220 Extremely flammable gas.; Gases under pressure - Liquefied gas: H280 Contains gas under pressure, may explode when heated.; Acute toxicity - Inhalation - Category 3: H331 Toxic if inhaled.; Skin corrosion/irritation - Category 2: H315 Causes skin irritation.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation.; Respiratory sensitizers - Category 1B: H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.; Skin sensitizers - Category 1B: H317 May cause allergic skin reaction.; Germ cell mutagenicity - Category 1B: H340 May cause genetic defects.; Carcinogenicity - Category 1B: H350 May cause cancer.; Reproductive Toxicity - Category 1: H360 May damage fertility or the unborn child.; Specific target organ toxicity - Single exposure - Category 3: H335 May cause respiratory irritation.; Specific target organ toxicity - Repeated exposure - Category 1: H372 Causes damage to organs through prolonged or repeated exposure.

1,4-Dioxane
123-91-1 (<0.1)

Flammable liquids - Category 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Category 2: H319 Causes serious eye irritation.; Carcinogenicity - Category 2: H351 Suspected of causing cancer.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

Components	WHMIS Ingredient Disclosure List -
Propylene Oxide	1 %
Ethylene oxide	0.1 %
1,4-Dioxane	0.1 %

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Poloxamer 124	9003-11-6	Present	Not Listed
Propylene Oxide	75-56-9	Present	Not Listed
Ethylene oxide	75-21-8	Present	Not Listed
1,4-Dioxane	123-91-1	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances

Poloxamer 124	9003-11-6	Not listed
Propylene Oxide	75-56-9	Present
Ethylene oxide	75-21-8	Present
1,4-Dioxane	123-91-1	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Poloxamer 124	9003-11-6	Not listed
Propylene Oxide	75-56-9	Not listed
Ethylene oxide	75-21-8	Not listed
1,4-Dioxane	123-91-1	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
Poloxamer 124	9003-11-6	
Propylene Oxide	75-56-9	Flammable liquids - Flam. Liq. 1: H224 Extremely flammable liquid and vapour.; Acute toxicity - Oral - Acute Tox. 4: H302 Harmful if swallowed.; Acute toxicity - Dermal - Acute Tox. 3: H311 Toxic in contact with skin.; Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled.; Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation.; Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation.; Germ cell mutagenicity - Muta. 1B: H340 May cause genetic defects.; Carcinogenicity - Carc. 1B: H350 May cause cancer.; Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation.603-055-00-4
Ethylene oxide	75-21-8	Flammable gases - Flam. Gas 1: H220 Extremely flammable gas.; Gases under pressure: H280 Contains gas under pressure, may explode when heated.; Acute toxicity - Inhalation - Acute Tox. 3: H331 Toxic if inhaled. (Minimum classification); Skin corrosion/irritation - Skin Irrit. 2: H315 Causes skin irritation.; Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation.; Germ cell mutagenicity - Muta. 1B: H340 May cause genetic defects.; Carcinogenicity - Carc. 1B: H350 May cause cancer.; Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation.603-023-00-X
1,4-Dioxane	123-91-1	Flammable liquids - Flam. Liq. 2: H225 Highly flammable liquid and vapour.; Serious Eye Damage/Eye Irritation - Eye Irrit. 2: H319 Causes serious eye irritation.; Carcinogenicity - Carc. 2: H351 Suspected of causing cancer.; Specific target organ toxicity - Single exposure - STOT SE 3: H335 May cause respiratory irritation.; Supplemental Hazards: EUH019 May form explosive peroxides.; Supplemental Hazards: EUH066

		Repeated exposure may cause skin dryness or cracking.603-024-00-5
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EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Poloxamer 124	9003-11-6		No information	
Propylene Oxide	75-56-9	F+; R12 Xn; R20/21/22 Xi; R36/37/38 Carc.Cat.2; R45 Muta.Cat.2; R46	No information	S53-S45
Ethylene oxide	75-21-8	F+; R12 T; R23 Xi; R36/37/38 Carc.Cat.2; R45 Muta.Cat.2; R46 R6	No information	S53-S45
1,4-Dioxane	123-91-1	F; R11-19 Xi; R36/37 Carc.Cat.3; R40 R66	No information	S2 S9 S16 S36/37 S46

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Not dangerous

16. OTHER INFORMATION

Preparation Date: 3/11/2015
Revision Date: 10/09/2018
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.

End of Safety Data Sheet