

PROPYLENE GLYCOL USP  
20251

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	PROPYLENE GLYCOL USP
Product code	20251
Product Use Description	No data

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Appearance: liquid,, Colorless

CAUTION! MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. NOTICE: WHILE THIS MATERIAL HAS A LOW LEVEL OF TOXICITY, GOOD INDUSTRIAL HYGIENE PRACTICES ARE ENCOURAGED TO MINIMIZE EXPOSURE.

**Potential Health Effects**

**Routes of exposure**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

**Eye contact**

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

**Skin contact**

May cause mild skin irritation. Symptoms may include redness and burning of skin. Although rare, skin contact with propylene glycol may cause allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects). Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**Ingestion**

Swallowing this material is not likely to be harmful.

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**Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material is not likely to be harmful.

**Aggravated Medical Condition**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), kidney

**Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness)

**Target Organs**

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: kidney damage

**Carcinogenicity**

This material is not expected to cause cancer in humans since it did not cause cancer in laboratory animals. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

Propylene glycol was not harmful to the fetus in laboratory animal studies.

**Other information**

Propylene glycol may be absorbed in potentially harmful amounts when applied in large quantities to severe burns (second or third degree) over large areas of the body as part of a cream or other topical application. Absorption under such circumstances can elevate serum osmolality and may result in osmotic shock.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS-No.</b>	<b>Concentration</b>
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#### 4. FIRST AID MEASURES

##### **Eyes**

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

##### **Skin**

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

##### **Ingestion**

First aid is not normally required. If symptoms develop, seek medical attention.

##### **Inhalation**

First aid is not normally required. If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention.

##### **Notes to physician**

**Hazards:** No information available.

**Treatment:** No information available.

#### 5. FIRE-FIGHTING MEASURES

##### **Suitable extinguishing media**

Water spray, Carbon dioxide (CO<sub>2</sub>), Alcohol-resistant foam, Dry chemical

##### **Hazardous combustion products**

May form:, carbon dioxide and carbon monoxide, organic compounds

##### **Precautions for fire-fighting**

No special fire hazards are known to be associated with this product. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

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**Flammability Class for Flammable Liquids**  
Combustible Liquid Class IIIB

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

No data

### Environmental precautions

No data

### Methods for cleaning up

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly. Absorb liquid on vermiculite, floor absorbent or other absorbent material.

## 7. HANDLING AND STORAGE

### Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

### Storage

Store in a cool, dry, ventilated area, away from incompatible substances.

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## **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **Exposure Guidelines**

#### **General advice**

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

#### **Exposure controls**

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

#### **Eye protection**

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

#### **Skin and body protection**

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

#### **Respiratory protection**

If overexposure has been determined or documented, a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Physical state</b>	liquid
<b>Form</b>	Viscous liquid
<b>Colour</b>	Colorless
<b>Odour</b>	Practically odorless
<b>Boiling point/boilingrange</b>	188.20 °C / 370.8 °F
<b>Melting point/range</b>	-74 °F / -59 °C
<b>pH</b>	No data
<b>Flash point</b>	210 °F / 99 °C, Closed Cup
<b>Evaporation rate</b>	< 0.01 (N-Butyl Acetate)
<b>Explosion limits</b>	2.6 %(V) 12.6 %(V)
<b>Vapour pressure</b>	0.01 kPa @ 77 °F / 25 °C
<b>Vapour density</b>	2.600 (AIR=1)
<b>Density</b>	1.037 g/cm <sup>3</sup> @ 68 °F / 20 °C 8.65 lb/gal @ 68 °F / 20 °C
<b>Solubility</b>	completely soluble in water
<b>Partition coefficient: n-octanol/water</b>	No data
<b>Autoignition temperature</b>	700 °F / 371 °C

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

Avoid contact with:

### Incompatible products

Avoid contact with:, Strong acids, strong bases, strong oxidizing agents

### Hazardous decomposition products

May form:, carbon dioxide and carbon monoxide, organic compounds

### Hazardous reactions

Product will not undergo hazardous polymerization.

### Thermal decomposition

No data

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## 11. TOXICOLOGICAL INFORMATION

**Acute oral toxicity**

**Acute inhalation toxicity**

**Acute dermal toxicity**

## 12. ECOLOGICAL INFORMATION

**Aquatic toxicity**

**Acute and Prolonged Toxicity to Fish**

No data

**Acute Toxicity to Aquatic Invertebrates**

No data

**Environmental fate and pathways**

No data

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

## 14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

## 15. REGULATORY INFORMATION

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**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**SARA Hazard Classification** No SARA Hazards

**SARA 313 Component(s)**

	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Other</b>
<b>HMIS</b>	1*	1	0	
<b>NFPA</b>	0	1	0	

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).