

PROPYLENE GLYCOL USP/EP K
104078

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 number	1-800-ASHLAND (1-800-274-5263)

Product name	PROPYLENE GLYCOL USP/EP K
Product code	104078
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, Practically odorless, Colorless

CAUTION! No OSHA Hazards. No OSHA Hazards.

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.

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.

PROPYLENE GLYCOL USP/EP K
104078

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

Components	CAS-No.	Concentration
GLYCOL	NJTS# 254504001- 5231	<=100%

4. FIRST AID MEASURES

Eyes

PROPYLENE GLYCOL USP/EP K
104078

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 (CO2), 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.

Flammability Class for Flammable Liquids

Combustible Liquid Class IIIB Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

No data

PROPYLENE GLYCOL USP/EP K
104078

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.

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

No data

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

PROPYLENE GLYCOL USP/EP K
104078

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

Wear resistant gloves (consult your safety equipment supplier).
To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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

Physical state	liquid
Form	Viscous liquid,
Colour	Colorless
Odour	Practically odorless
Boiling point/range	370.8 °F / 188.2 °C
Melting point/range	-74 °F / -59 °C
pH	No data
Flash point	209.98 °F / 98.88 °C Closed Cup
Evaporation rate	< 0.01 N-Butyl Acetate
Explosion limits	2.6 %(V) 12.6 %(V)
Vapour pressure	0.017198 kPa @ 77 °F / 25 °C
Vapour density	2.600
Density	1.037 g/cm ³ @ 68.00 °F / 20.00 °C 8.65 lb/gal @ 68 °F / 20 °C
Solubility	completely soluble in water
Partition coefficient (n-octanol/water)	No data
Autoignition temperature	700 °F / 371 °C

PROPYLENE GLYCOL USP/EP K
104078

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

None known.

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

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

GLYCOL

LD 50 Rat: 21.0 - 33.7 g/kg

Acute inhalation toxicity

Acute dermal toxicity

GLYCOL

LD 50 Rabbit: 28 g/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

PROPYLENE GLYCOL USP/EP K
104078

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 Company, IC&S Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

15. REGULATORY INFORMATION

California Prop. 65

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

Additional regulations

US. High Production Volume Chemicals

SARA Hazard Classification No SARA Hazards

SARA 313 Component(s)

OSHA Hazards No OSHA Hazards No OSHA Hazards

	Health	Flammability	Reactivity	Other
HMIS	1	1	0	
NFPA	0	1	0	

PROPYLENE GLYCOL USP/EP K
104078

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).