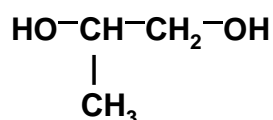


**Technical Bulletin****Propylene Glycol – USP****Proper Handling**

Generic: 1,2 propanediol

**STRUCTURE****DESCRIPTION**

A relatively nontoxic liquid that is practically colorless, odorless, and tasteless.

**APPLICATIONS**

A solvent for flavors, extracts, drugs, personal care products, and food antioxidants; a heat transfer medium; an emollient, humectant, and plasticizer for personal care creams and gels, tobacco products, baked goods, coconut, cellophane, cork, adhesives, and paper products; a lubricant and mold inhibitor for food processing equipment; a humectant for pet food.

**HANDLING, STORAGE, AND SHIPPING PRECAUTIONS**

Propylene Glycol - USP is a high-purity material which must be handled with special precautions to avoid contamination. Propylene Glycol - USP is shipped only in resin lined tank cars and/or stainless steel tank wagons. Drums are lined. Drums used for salable Propylene Glycol - USP must have a U.S. Steel 10-3 (epoxy) or equivalent lining. The bungs and plugs must also be lined. Product is available in barges, lined tank cars and dedicated tank trucks. Certain government regulations may apply at the time of shipment.

Under ordinary storage conditions, mild steel is a satisfactory material of construction; however, for long term storage where iron contamination and color are objectionable, stainless steel or aluminum vessels are recommended. Linings based on phenolic and epoxy resins are also satisfactory for this service.

Propylene Glycol - USP requires separate aluminum or stainless steel unloading lines for tank cars and tank wagons. Neoprene, rubber, and porous plastic materials should not be used to handle Propylene Glycol - USP.

Since Propylene Glycol - USP is hygroscopic, it should be protected from picking up atmospheric moisture by a dry inert gas pad or through the use of a dryer on the tank breather.

If drums are used for the storage of Propylene Glycol - USP the condition of the lining should be checked periodically. Abusive handling of the drums may result in cracks in the lining. Such drums should be discarded.

If good hygienic practices are followed and the recommended materials of construction are used, the handling of Propylene Glycol - USP should be no problem. Just remember that it should be handled as though it were a food.

For additional information on handling and storage of Propylene Glycol - USP, please contact your Huntsman Technical Service Representative.

### ADDITIONAL INFORMATION

Regulatory Information	
DOT Classification	Not regulated
Freight Classification	Propylene Glycol
HMIS Code	0-1-0
CAS Number	57-55-6

Chemical Control Laws	
TSCA Inventory	Listed on or exempt
WHMIS Classification	Not regulated
Canadian DSL	Listed on or exempt
European EINECS	Listed on or exempt
Australian AICS	Listed on or exempt
Japanese MITI	Listed on or exempt

Physical Properties	
Arsenic, ppm	1 max.
Boiling range ASTM, °C, IBP	185 min.
ASTM, °C, DP	189 max.
Flash point, PMCC, °F	212
Freezing point, °C	< -76
Molecular weight	76
Refractive index, 20°C	1.4310 min. 1.4330 max.
Specific gravity, 25/25°C	1.0350 min. 1.0370 max.
Vapor pressure, 20°C, mm Hg	< 1
Viscosity, 20°C, cp	60
Water solubility, %	> 10
Weight, 20°C, lb/gal	8.64

### PRODUCT SAFETY POLICY

It is the product safety policy of Huntsman Corporation to provide our customers with information on the safe handling and use of our products. The Material Safety Data Sheet (MSDS) should always be read and understood thoroughly before handling the product, and adequate safety procedures should be followed. Information on the toxicity, environmental, and industrial hygiene aspects of our products may be found in the MSDS. Precautionary measures include: use only with adequate ventilation; avoid breathing vapor, mist or gas; avoid contact with eyes, skin and clothing; keep container closed; wash thoroughly after handling.

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**For Your Protection****HEALTH AND SAFETY**

*The Safety and Health information in this data sheet does not contain sufficient detail for safe handling in all cases. For detailed safety and health information refer to the **Material Safety Data Sheet** for this product.*

**EMERGENCY CALLS: Huntsman Emergency Response Center: 800-328-8501, 409-722-8381 / CHEMTREC - Spills, Leak, Fire 800-424-9300 (in USA and Canada)**

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