

Technical Bulletin

HUNTSMAN

ETHYLENE GLYCOL PRODUCTS

The ethylene glycol family of products are clear, of specifications and typical properties of the three major moderately viscous, hygroscopic liquids at room ethylene glycols: Ethylene Glycol (EG), Diethylene temperature. For your convenience, below is a summary Glycol (DEG), and Triethylene Glycol (TEG).

SPECIFICATIONS	Measure	EG-Industrial	DEG	TEG
Acidity as acetic acid	wt. %	0.005 max.	0.005 max.	0.01 max.
Appearance		Clear and substantially free of suspended matter		
Ash	wt. %	0.005 max.	0.005 max.	0.005 max.
Color	Pt-Co	10 max.	15 max.	25 max.
Water	wt. %	0.3 max.	0.2 max.	0.1 max.
Ethylene Glycol	wt. %	99.5 min.	-	-
Boiling range, IBP	ASTM, °C	-	242 min.	278 min.
DP		-	250 max.	300 max.
Iron as Fe	ppm	1.0 max.	1.0 max.	-
Chlorides	ppm	0.1 max.	-	-

TYPICAL PROPERTIES		of pure compounds		
Molecular weight		62	106	150
Boiling point, 760 mm Hg	°C	197.2	244.8	287.4
Flash point, PMCC	°F	244	290	335
Freezing point	°C	-13	-10.5	-7.2
Specific gravity	20/20°C	1.1155	1.1184	1.1254
Specific heat, 0°C	cal/gm/°C	0.544	0.551	0.525
Viscosity, 20°C	cp	20.9	35.7	47.8
Density, 20°C	lb/gal	9.28	9.31	9.36
Water solubility		complete	complete	complete
Vapor pressure, 20°C	mm Hg	0.1	0.01	0.01

APPLICATIONS

Ethylene glycols find many diverse industrial uses which include freeze protection, heat transfer and hydraulic fluids; natural gas and hydrocarbon treating agents; hygroscopic agents for paper, cork and textile conditioning; plasticizer formulations and raw materials for ester and polyester production. The ethylene glycol family's solvency properties are useful in custom formulation of paints, dyes, inks and other blended products.

PRODUCT SAFETY POLICY

It is the product safety policy of Huntsman Petrochemical Corporation to provide our customers with information on the safe handling and use of our products. The Material Safety Data Sheet (MSDS) should 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.

SHIPPING

Available in lined tank cars, tank trucks, or nonreturnable drums. Certain government regulations may apply at the time of shipment. Please consult individual technical bulletins for more specific information.

Huntsman Petrochemical Corporation warrants only that its products meet the specifications stated herein. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, NO GUARANTEE, WARRANTY, OR REPRESENTATION IS MADE, INTENDED, OR IMPLIED AS TO THE CORRECTNESS OR SUFFICIENCY OF ANY INFORMATION, OR AS TO THE SUITABILITY OF ANY CHEMICAL COMPOUNDS FOR ANY PARTICULAR USE, OR THAT ANY CHEMICAL COMPOUNDS OR USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. EACH USER SHOULD CONDUCT A SUFFICIENT INVESTIGATION TO ESTABLISH THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE. Products may be toxic and require special precautions in handling. For all products listed, user should obtain detailed information on toxicity, together with proper shipping, handling and storage procedures, and comply with all applicable safety and environmental standards.