

Technical Bulletin

HUNTSMAN

ETHYLENE GLYCOL PRODUCTS

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

ETHYLENE GLYCOL PRODUCTS

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 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 non-returnable drums. Certain government regulations may apply at the time of shipment. Please consult individual technical bulletins for more specific information.