



Technical Datasheet

Triethylene Glycol (TEG)

Description

Triethylene glycol, also known as TEG, is a colorless liquid alcohol with chemical formula of $C_6H_{14}O_4$. Triethylene glycol is the third member of the dihydric alcohol series and is produced alongside mono and diethylene glycol as a by-product of the direct hydration reaction of ethylene oxide. TEG is odorless and non-flammable. This product has a high viscosity and boiling point and is also soluble in water. TEG is preferably used in cases that require a higher boiling point and lower volatility than diethylene glycol. TEG is soluble in acetone, ethanol, acetic acid, glycerin, and aldehydes. It is slightly soluble in diethyl ether, and insoluble in oils and most hydrocarbons.

Application

TEG is widely used in oil and gas industry, household and industrial cleaners, textile, cosmetic products, production of Resins, solvent applications, plasticizing applications and bactericide production.

Advantages

- TEG is a common and ideal chemical intermediate for the synthesis of other chemicals.
- Having lower vapor pressure and lower viscosity, TEG has great benefits compared to the other glycols.
- TEG is preferably used in cases that require a higher boiling point and lower volatility than diethylene glycol.
- Triethylene glycol is non-hazardous.

Typical Properties

Characteristic	Test Method	Unit	Value
PURITY	ASTM E - 202	WT.%	97 MIN
MONOETHYLENE GLYCOL	ASTM E - 202	WT.%	2 MAX.
WATER CONTENT	ASTM E - 202	WT.%	0.05 MAX.
ACIDITY AS ACETIC ACID	ASTM D - 1613	WT.%	0.01 MAX
ASH CONTENT	ASTM D - 254/A	PPM	50 MAX
Density S.G. (20/20 °C)	ASTM D - 891	-	1.124 - 1.126
COLOR	ASTM D - 1209	Pt - Co	25 MAX
DISTILLATION @ 760 MM-Hg			
5-95 VOL % RANGE	ASTM D - 1078	°C	280-295

Packaging

Triethylene Glycol (TEG) is available in in 220 kg (220 Liter) Drums.