

Triethylene Glycol

Chemical Name

Triethylene Glycol

Introduction

Triethylene Glycol (TEG) is a viscose, odorless and colorless chemical liquid with chemical formula $C_6H_{14}O_4$. TEG is produced as a co-product from the reaction between ethylene oxide and water. It is miscible with water and soluble in ethanol, acetone, acetic acid, glycerine, pyridine and aldehydes. It is slightly soluble in diethyl ether, and insoluble in oil, fat and most hydrocarbons

General Applications

TEG is used in a variety of applications. The oil and gas industries uses TEG to dehydrate the natural gas as well as other gases including CO_2 , H_2S and other oxygenated gases. This compound can be used as a solvent in many chemical processes. Like DEG, TEG is used as plasticizers, intermediate and absorbent. TEG is also useful in anti-freezing, de-icing and automotive care products

Triethylene Glycol

Specification

No.	Test	Standard	References
1	Purity, %	97 Min	ASTM E 202
2	Color (Pt/Co)	25 max	ASTM D 891
3	Specific gravity (@ 20 °C)	1.124 – 1.126	ASTM D 891
4	TEG (T.TEG), %	1 Max	ASTM E 202
6	DEG, %	2 Max	ASTM E 202
7	Water, %	0.05 Max	ASTM E 203
8	Acidity, %	0.01 Max	ASTM D 1613
9	Ash, %	0.005 Max	DC – 254/A