



TECHNICAL DATA SHEET

TEG (Triethylene Glycol)

Parameter	Unit	Quantity	Test Method
Purity	wt %	99 min.	ASTM E-2409
Appearance	visual	clear	ASTM E-2680
Specific gravity	at 20°C/20°C	1.124-1.126	ASTM D-4052
Water	wt %	0.2 max.	ASTM E-1064
Acidity (as Acetic acid)	wt %	0.005 max.	ASTM D-1613
Color	APHA	25 max.	ASTM D-1209
Ash	wt %	0.01 max.	ASTM D-482

Triethylene glycol is a colourless, odourless, non volatile hygroscopic liquid. It is characterised by two hydroxyl groups and two ether linkages, which contribute to its high water solubility, hygroscopicity, solvent properties and reactivity with many organic compounds. Traditionally it has been used for many of the same applications as diethylene glycol. Increasingly, however, it is displacing diethylene glycol in many of these applications on account of its lower toxicity.

The major applications for triethylene glycol are as a drying agent for natural gas, as a humectant, as a solvent and in the manufacture of vinyl plasticisers. Synonyms for triethylene glycol (TEG) are triglycol, 2,2-(Ethylene-dioxy) diethanol and ethylene glycol dihydroxydiethyl ether.

Its Chemical Abstracts Service (CAS) Number is 112-27-6.

Specifications

Specifications are available on request

Packages

Triethylene glycol is available in bulk shipments, road and rail tankers and in nominally 230 Kgs drums.

Storage

Triethylene glycol can normally be stored in mild steel vessels. Where trace iron contamination or slight discoloration is critical, lined steel or stainless steel vessels are recommended. A nitrogen blanket can be used to exclude atmospheric moisture if a low water content is to be maintained over a long storage period. Alternatively, a desiccant unit can be installed on the tank vent line to dry incoming air.

The liquid has a relatively high freezing point (-7°C) and if outside storage is contemplated in an extremely cold climate, it may be advisable to place a heating coil in the bottom of the storage tank. Hot water or low-pressure steam are the most desirable heating mediums and care must be taken with such installations as excessive temperatures can cause degradation of the product.

Chemical Properties

Triethylene glycol undergoes the typical reactions of hydroxyl containing organic compounds. For example it can react to some extent with oxidising agents and give rise to dangerous reactions with fuming sulphuric acid, concentrated nitric acid and chlorosulphuric acid.