



Technical Datasheet

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Monoethylene Glycol (MEG)

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Description

Monoethylene Glycol (MEG) is one of the most common organic compound, also known as 1 and 2-ethane diol, ethylene alcohol, 1 and 2-dihydroxyethane and hydro-carbonic acid. MEG is the simplest form of glycols with chemical formula of C₂H₆O₂. MEG is colorless, odorless, and toxic with a sweet taste. Monoethylene glycol is widely used to make polyester resins; it is also a major component of antifreeze formulations.

Application

Monoethylene Glycol (MEG) is primarily the raw material for the production of polyester fibers, polymer resins, textile industry, plastics industry, cosmetics industry and the production of polyethylene terephthalate (PET) used in the beverage bottling industry. Monoethylene glycol (MEG) is utilized in the production of vehicles' antifreeze agents, cooling equipment and aircraft antifreeze. It is also used in hydraulic brake fluids and cooling systems such as vehicles and air conditioning units, as it acts as a cooling and heat transfer agent. In gas industry, Monoethylene glycol is utilized as a dehydrating compound to remove water molecules from natural gas. Moreover, the hydrophilicity of MEG makes it ideal for use in the purification of fiber, paper, glue, leather, printing ink and cellophane.

Advantages

- MEG has a low freezing point and a high boiling point, which is used in many industrial applications.
- MEG is widely available.
- MEG has a lower price compared to other glycols.
- MEG has a high durability.
- The structure of MEG is very similar to water and makes it easy to mix with water.

Packaging

Monoethylene Glycol (MEG) is available in in 220 kg (220 liter) Drums.

Typical Properties

Characteristic	Test Method	Unit	Value
PURITY	ASTM E - 202	WT. %	99.8 MIN
DIETHYLENE GLYCOL	ASTM E - 202	WT. %	0.08 MAX.
WATER CONTENT	ASTM E - 203	WT. %	0.08 MAX.
ACIDITY AS ACETIC ACID	ASTM D - 1613	PPM	10 MAX
ASH CONTENT	ASTM D - 254/A	gr/100ml	0.005 MAX
CHLORIDES	EO - 635	WT. PPM	0.1 MAX.
IRON	ASTM E - 202	WT. PPM	0.1 MAX.
Density S.G. (20/20 °C)	ASTM D - 891	-	1.1151 - 1.1156
COLOR	ASTM D - 1209	Pt - Co	5 MAX
ALDEHYDE AS ACETALDEHYDE	DC - 163C	WT. PPM	10 MAX.
DISTILLATION @ 760 MM-Hg			
IBP	ASTM D - 1078	°C	196 MIN
DP	ASTM D - 1078	°C	199 MAX
5-95 VOL % RANGE	ASTM D-1078	°C	1 MAX.
UV TRANSMITTANCE			
AT 220 nm	EO -577A	T %	70 MIN.
AT 275 nm	EO -577A	T %	95 MIN.
AT 350 nm	EO -577A	T %	99 MIN.