

Mono Ethylene Glycol (MEG) Product Datasheet

Item number: 60-134

Specification

Parameter	Unit	Min.	Max.	Test Method
Purity	WT. %	99.8		ASTM E - 202
Diethylene Glycol	WT. %		0.08	ASTM E - 202
Water	WT. %		0.08	ASTM E - 203
Acidity as Acetic Acid	WT. ppm		10	ASTM D - 1613
Ash	gr / 100 ml		0.005	DC – 254 A
Chlorides	WT. ppm		0.1	EO - 635
Iron	WT. ppm		0.1	ASTM - E 202
Aldehyde as Acetaldehyde	WT. ppm		10	ASTM - 163 C
Color Pt-Co	Pt - Co		5	ASTM D - 1209
Sp. Gr (20/20 °C)	-	1.1151	1.1156	ASTM D – 891
Distillation @ 760 mm-hg				
IBP	°C	196		ASTM D - 1078
DP	°C		199	ASTM D - 1078
5-95 Vol. % Range	°C		1	ASTM D - 1078
UV Transmittance				
AT 220 nm	T %	70		EO – 577 A
AT 275 nm	T %	95		EO – 577 A
AT 350 nm	T %	99		EO – 577 A

Delivery form

- bulk
- barrels of 220 liters, 4 drums strapped on a pallet

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General information

Monoethyleneglycol obtained from the reaction of ethylene oxide and water. It is a clear, transparent and odorless liquid that can be mixed with water in any proportion.

Storage

Under nitrogen blanket and at ambient temperature.

Application areas

• Polyester :

Polyester fibers, threads, films and polyester resins are produced from the reaction between Monoethyleneglycol with dibasic acids and their esters, such as terephthalic, oxalic, succinic, glutamic and adipic acids among others. The polyterephthalate fibers of Monoethyleneglycol are widely used in the textile industry and known commercially as Tergal, Terilene, Dacron and Trevira among other names. Due to their high mechanical resistance, excellent dielectric properties and low hygroscopicity, polyester films are used to produce photographic films, magnetic tapes and packaging. Monoethyleneglycol is used in the synthesis of polyethylene terephthalate (PET), which is frequently used in the packaging of foodstuff and carbonated beverages.

• Resins :

Monoethyleneglycol is used in the synthesis of unsaturated polyester resins, alkyd resins, rosin esters and polyurethane resins. It acts as a coalescence and anti-freezing agent in emulsified resins. Used together with adipic acid and other glycols, rubber with a high chemical and abrasion resistance can be synthesized. Resins produced from oleic acid and Monoethyleneglycol, known as alkyd resins, are used frequently in the industry of paints and varnishes.

• Wetting and plasticizing agents:

Monoethyleneglycol can be used as wetting and plasticizing agent in the production of cellophane, glues and adhesives, textiles, printing ink, leather, cosmetics, paper and pharmaceutical products.

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• **Coolant additives :**

Monoethylenglycol is used in industrial refrigeration circuits and internal combustion engine coolant systems with the purpose of raising the boiling point and reducing the freezing point of the solution used. For this application, an anticorrosive must be added to Monoethylenglycol to prevent the system from suffering water corrosion. Diethylenglycol can be used in antifreeze formulations in proportions of up to 10% together with Monoethylenglycol. The various quantitative ratios between these components are suitable for specific applications in the field of industrial refrigeration.

• **Other uses :**

Ethylenglycols can also be used in the formulation of printing ink, in the treatment of gases, in the formulation of fire-resistant hydraulic fluids, in the formulation of cutting oils, in the formulation of surface polishers, in the formulations of agrochemicals, in the extraction of solvents, in the manufacture of pigmented pastes and putty for walls, and in the synthesis of explosives.