

SHAZAND Petrochemical Company

TRI-ETHYLENE GLYCOLE

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	WT. PPM	10 MAX.
ASH	DC – 254A	gr/100ml	MAX. 0.005
CHLORIDES	EO - 635	WT. PPM	0.1 MAX.
IRON	ASTM E – 202	WT. PPM	0.1 MAX.
ALDEHYDE AS ACETALDEHYDE	DC – 163C	WT. PPM	10 MAX.
COLOR Pt-Co	ASTM D – 1209	Pt - Co	5 MAX.
SP. GR (20/20 °C)	ASTM D – 891	-	1.1151 - 1.1156
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	Т%	70 MIN.
AT 275 nm	EO -577A	Τ%	95 MIN.
AT 350 nm	EO -577A	Τ%	99 MIN.

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.

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 terephtalic, oxalic, succinic, glutamic and adipic acids among others. The polyterephtalate 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 tereftalate (PET), which is frequently used in the packaging of foodstuff and carbonated beverages.

