



Tetraethylenepentamine - TEPA



Molecular Weight	189 (<i>Linear component</i>) 215 (<i>Cyclic component</i>)
CAS Reg. No.	112-57-2
EINECS No.	203-986-2

Solubility

water	miscible, hygroscopic
ethanol	miscible
acetone	miscible
ether	miscible
benzene	miscible
hexane	immiscible

Synonyms

1,2-Ethanediamine, N-(2-aminoethyl)-
N'-[2-((2-aminoethyl)amino)ethyl]-
3,6,9-triazaundecamethylenediamine
1,11-Diamino-3,6,9-triazaundecane

Corrodes copper and its alloys. Reacts with aldehydes, acids and chlorinated hydrocarbons. Absorbs carbon dioxide from air.

Specification

Appearance	clear, yellow, viscous liquid
Assay (Pentamines)	min. 95.0% (GLC)
Light Ends	max. 3% (GLC)
Heavy Ends	max. 3% (GLC)
Water	max. 0.5% (KF titr.)

Applications

Intermediate for the synthesis of:

- coatings and auxiliaries
- synthetic rubber and rubber chemicals
- plastics and auxiliaries
- coolants, lubricants and antifreezes
- auxiliaries for the recovery and processing of oil, coal and natural gas

Test methods are available upon request.

Typical Properties

Boiling Range	approx. 190-240°C (at 20 mbar)
Density	approx. 998 kg/m ³
Viscosity	80 mPa·s (at 20°C)
Flash Point	193°C (Open Cup)
Vapor Pressure	< 0.1 mbar at 20°C
Refract. Index, n _D ²⁰	1.500
Color	approx. 4 Gardner

Packaging

Delivered in stainless steel road tankers and bulk containers, or in mild steel drums containing 200 kg net. IBC containing 1000 kg net is also available.

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