Akzo Nobel
Functional Chemicals AB
Ethylene Amines

Product Information

AkzoNobel
Tomorrow's Answers Today

Triethylenetetramine - TETA

$H_2N - CH_2 - CH_2 - NH- CH_2 - CH_2 - NH -CH_2 - CH_2 - NH_2$

Molecular Weight	146 *(Linear component)* 172 *(Cyclic component)*
CAS Reg. No.	112-24-3
EINECS No.	203-950-6

Synonyms

1,2-Ethanediamine, N,N'-bis-(2-aminoethyl)-
1,8-Diamino-3,6-diazaoctane
1,4,7,10-Tetraazaoctane

Specification

Appearance	clear, pale, colored liquid
Assay (Tetramines)	min. 95.0% *(GLC)*
Light Ends	max. 3% *(GLC)*
Heavy Ends	max. 3% *(GLC)*
Water	max. 0.5% *(KF titr.)*
Color	max. 50 Hazen *(Comparator)*

Test methods are available upon request.

Typical Properties

Boiling Range	approx. 270-300°C
Boiling Point	approx. 280°C
Density	approx. 0.98 kg/m^3
Viscosity	30 mPa·s *(at 20°C)*
Flash Point	129°C *(Open Cup)*
Vapor Pressure	1.3 Pa at 20°C
Refract. Index, $\mathbf{n}_D^{20}$	1.497

Solubility

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

Corrodes copper and its alloys. Reacts with aldehydes, acids and chlorinated hydrocarbons. Reacts with water under evolution of heat (formation of hydrate). Absorbs carbon dioxide from air.

Applications

Intermediate for the synthesis of:
– cellulose chemicals and paper auxiliaries
– synthetic rubber and rubber chemicals
– coatings
– plastics
– auxiliaries for the recovery and processing of oil, coal and natural gas.

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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