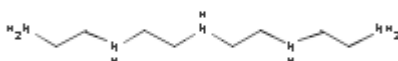


## Tetraethylenepentamine

### Structure



Relative molecular mass	189 linear component 215 Cyclic component
CAS No.	112-57-2
EINECS No.	20 39 862

### Synonyms

1,2 – Ethanediamine, N – (2-aminoethyl) – N' - [ 2 - {(2 – aminoethyl)amino}ethyl]-[CAS Name]  
1,2 - -ethanediamine, N, N, N' –tris (2 – aminoethyl)-

### Specification

Appearance	clear, yellow, viscous liquid
Assay (Pentamines)	min. 95.0 %
Light ends	max. 3 %
Heavy ends	max. 3 %
Water	max. 0,5 %

*Test methods are available on request*

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LANXESS AG, Leverkusen, Germany

## Tetraethylenepentamine

### Typical Properties

Boiling range	approx. 190-240°C	(at 20 mbar)
Density	approx. 998 kg/m <sup>3</sup>	
Viscosity	80 mPa s (at 20°C)	
Flash point	193 °C (open cup)	
Vapour pressure	< 0.1 mbar ab 20°C	
Refract. Index, n <sub>D</sub> <sup>20</sup>	1.500	
Colour (Gardner)	approx. 4	

### Solubility in

Water	miscible, hydroscopic
Ethanol	miscible
Acetone	miscible
Ether	miscible
Benzene	miscible
Hexane	immiscible

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

### 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.

### Transport, toxicity and hazards

Please refer to our safety data sheet.

### Risk phrases

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R21/22-	Harmful in contact with skin and if swallowed.
R34-	Causes burns.
R43-	May cause sensitisation by skin contact.
R51/53-	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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