

Technical Data Sheet

Dimethylaminopropylamine (DMAPA)

Chemical Synonym

N,N-3-dimethyl-1,3-propanediamine; 1-Amino-3-dimethylaminopropane; 3-Aminopropyldimethylamine; N,N-Dimethyl-1,3-diaminopropane; N-,N-Dimethylaminopropylamine; DMAPA

Applications

- Cosmetic and personal care intermediate
- Home & industrial care intermediates

Product Description

DMAPA is a clear colorless liquid, free of suspended matter.

DMAPA is completely miscible with water, alcohols, esters and ketones. It has limited miscibility with diethylether, benzene, and chlorinated hydrocarbons.

DMAPA is either used on itself or as an intermediate in the production of:

- Surfactants
- Water treatment chemicals
- Ion exchange resins
- Polyurethane catalysts
- Epoxy resin hardeners
- Corrosion inhibitors
- Gasoline and motor additives / lubricating oil additives
- Textile auxiliaries
- Agrochemicals
- Pharmaceuticals
- Paper adjuvants
- Photographic adjuvants

Typical Properties

Property	Typical Value, Units
General	
Molecular Formula	CH ₅ H ₁₄ N ₂
Molecular Weight	102.179 g/mol
Appearance	Colorless liquid
Autoignition Temperature	215 °C
Boiling Point	135.1 °C
Density	
@ 25°C	0.8133 g/cm ³
Dissociation constant, pKa	
@ 35°C	9.33
Flash Point	
Closed Cup	30.5 °C

Freezing Point	-70 °C
Octanol-water partition coefficient, log Pow @ 25°C	-0.352
pH 100 g/l @ 20°C	12.2
Solubility in Water	Miscible
Vapor Density (air = 1)	3.50
Vapor Pressure @ 20°C	5.9 hPa
Viscosity @ 20°C	1.6 mPa·s

Packaging

- Bulk
- Steel drums (165 kg net)
- IBC containers (820 kg net)

Storage

Do not store in reactive material containers. Recommended suitable container materials include plastic, stainless and carbon steels.

DMAPA is neither explosive nor spontaneously flammable in air. However, it is flammable and corrosive.

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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