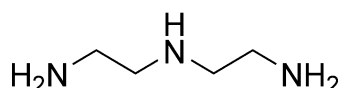


Technical Data Sheet DIETHYLENETRIAMINE (DETA)

General



MW: 103.2 g mol⁻¹

CAS No.: 111-40-0

EINECS No.: 203-865-4

IUPAC name: N'-(2-aminoethyl)ethane-1,2-diamine

Diethylenetriamine (DETA; CAS 111-40-0) is another aliphatic ethylene amine with two primary and one secondary amine groups. Just like EDA, DETA presents itself as a clear, colorless liquid. Typical application areas of diethylenetriamine include chelating agents, wet-strength resins, lubricant oil additives, oil field chemicals and polyamides for resins or epoxy curing agents.

Sales Specification

Characteristic	Unit	Specification	Methods of Analysis
Appearance	-	Clear liquid	200
Assay	w%	min 98.5	552
Water	w%	max 0.5	305
Color	Hazen	max 30	201

Methods of Analysis are available upon request.

In case of dispute, the listed Method of Analysis will be used as reference methods.

Physical and Chemical Properties

Property	Value	Property	Value
Form	viscous liquid	pH	12 at 20 °C
Colour	colourless	Melting point/freezing point	-39 °C at 1 013 hPa
Odour	ammoniacal	Boiling point/boiling range	207 °C at 1 013 hPa
Flammability (liquids)	Not classified as a flammability hazard	Flash point	96,7 °C at 1 013 hPa Method: Pensky-Martens closed cup
Explosive properties	Not explosive	Vapour pressure	0,2 hPa at 20 °C
Oxidizing properties	The substance or mixture is not classified as oxidizing	Relative vapour density	3,6
Water solubility	soluble	Density	957 kg/m ³ at 20 °C
Solubility in other solvents	Soluble in alcohols and hydrocarbons	Relative density	0,959 at 20 °C
		Partition coefficient: n-octanol/water	log Pow: -1,58 at 20 °C
		Viscosity, dynamic	5,05 mPa.s at 20 °C

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