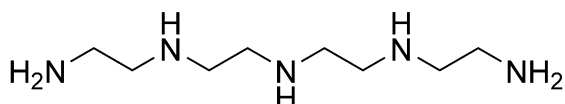


Technical Data Sheet TETRAETHYLENEPENTAMINE (TEPA)

General



MW: 189.31 g mol⁻¹
CAS No.: 90640-66-7/112-57-2 (TEPA)
EINECS No.: 203-986-2 (TEPA)
IUPAC name: Tetraethylenepentamine, linear, cyclic and branched

Tetraethylenepentamine (TEPA; CAS 90640-66-7 and 112-57-2) is a yellowish liquid containing linear, branched and cyclic molecules. Like TETA, TEPA is commonly used as an additive in fuel and lubricating oil production, as an epoxy curing agent or in the manufacture of asphalt additives.

Sales Specification

Characteristic	Unit	Specification	Methods of Analysis
Appearance	-	Clear yellowish liquid	200
Assay (Pentamines)	Area%	min 95.0	507
Water	w%	max 0.5	305
Color	Gardner	max 5	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	11,8 at 2 % solution
Colour	yellow	Melting point/freezing point	< -20 °C
Odour	ammoniacal	Boiling point/boiling range	375 °C
Flammability (liquids)	Not classified as a flammability hazard	Flash point	> 175 °C Method: closed cup
Explosive properties	Not explosive	Vapour pressure	0,00019 hPa at 20 °C
Oxidizing properties	The substance or mixture is not classified as oxidizing	Relative vapour density	6,53 (Air = 1.0)
Water solubility	> 1 000 g/l at 20 °C Very soluble	Density	993 kg/m ³
Solubility in other solvents	Soluble in Methanol, Acetone	Relative density	0,993
		Partition coefficient: n-octanol/water	log Pow: -3,16
		Viscosity, dynamic	80 mPa.s at 20 °C

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