

## Technical Data Sheet

### XA-70

#### General

CAS No.: 84238-53-9

EINECS No.: 282-508-4

Substance name: Reaction mass of 2,2'-iminodiethanol and 2-(2-(2-aminoethylamino)ethylamino)ethanol and 3,6,9-triazaundecamethylenediamine and trientine

Chemical Composition: Higher polyethylene polyamines approx. 50% (isomers of TETA, TEPA)

Alkanolamines approx. 50%

(AEEA, DEA, Hydroxyethyl DETA, and higher)

Low color heavy amine mixture with main product being L-TETA and HE-DETA. The application area for this mixture is Epoxy curing agents as part of polyamide formulations or adducts, corrosion inhibitors, mineral processing aids (flocculation, water treatment), various formulations calling for a high amine number and low color impact

#### Sales Specification

Characteristic	Unit	Specification	Methods of Analysis
Appearance	-	Clear yellowish liquid	200
Color	Gardner	max 2	201
Amine number	mgKOH/g	Min1100-Max 1350	234
Water	w%	max 1.0	305
Viscosity at 50°C	mPa.s	Max 100	589
L-TETA	w%	Report value	566
HE-DETA	w%	Report value	566
DEA	w%	Report value	566
AEEA	w%	Report value	566

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 25 % solution
Colour	yellow	Melting point/freezing point	< -30 °C at 1 013 hPa
Odour	ammoniacal	Boiling point/boiling range	254 °C at 1 013 hPa
Flammability (liquids)	Not classified as a flammability hazard	Flash point	176 °C at 1 013 hPa Method: Pensky-Martens ISO 2719
Explosive properties	Not explosive	Vapour pressure	0,00009 hPa at 20 °C
Oxidizing properties	The substance or mixture is not classified as oxidizing	Relative density	1,024 at 20 °C
Water solubility	at 20 °C soluble	Partition coefficient: n-octanol/water	log Pow: -2,6 at 25 °C
Solubility in other solvents	Soluble in ethanol and acetone	Viscosity, dynamic	40 mPa.s at 50 °C

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