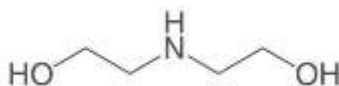


TIQ-F-QC-003
 Rev.00

Technical Data Sheet

DIETHANOLAMINE 99 % AR

Bis(2-hydroxyethyl)amine, 2,2'-Iminodiethanol



Product Code	B-3027	Grade	Analytical Reagent
Purity	99%	CAS No	111-42-2
Molecular Formula	C ₄ H ₁₁ NO ₂	Molecular Weight	105,14 g/mol
H.S.Code	2922.1990	Shelf Life	60 Months

Physical Properties

Physical state	Liquid	Melting point	27 °C at 1.013 hPa
Colour	Colourless, light yellow	Boiling point	217 °C at 200 hPa
Odour	Ammonical	Partition coefficient: noctanol/water	log Pow: -2,46 at 25 °C
pH value	11,0 - 12 at 105 g/l at 25 °C	Vapour pressure	1 hPa at 108 °C
Solubility in water	105 g/l at 20 °C	Flash point	138 °C
Density	1,097 g/cm ³ at 20 °C	Solubility in water	105 g/l at 20 °C
Explosion limits-lower (%)	1,6 %	Auto-ignition temperature	355 °C at 1.013 hPa
Explosion limits – upper (%)	10,6 %	Viscosity, dynamic	390,9 mPa.s at 30 °C

Packaging

500 ml

Specification

Appearance	Clear viscous liquid
Assay (by GC)	min 99.0 %
Wt. per ml at 20°C	1.095 – 1.097 g/cm ³
Refractive index (n _D ²⁰)	1.477 – 1.478
Apparent equivalent weight	104 – 106
Freezing point	27 – 28 °C
Colour	max 15 APHA
Residu on ignition (as SO ₄)	max 0.005 %
Water (H ₂ O)	max 0.15 %
Ethanolamine (GC)	max 0.3 %

Triethanolamine (GC)	max 0.3 %
Chloride (Cl)	max 0.001 %
Heavy metals (as Pb)	max 0.0001 %
Iron (Fe)	max 0.0001 %

Safety Information and Hazard Symbols



Symbol: GHS05, GHS07, GHS08

Signal Word: Danger

UN No.: not applicable

IMCO Class No.: not applicable

Packing Group: not applicable

Hazardous Statement: H302-H315-H318-H361fd-H373

Precaution Statement: P202-P280-P301+P312-P302+P352-P305+P351+P338-P308+P313