

Technical Bulletin**E-GRADE[®] MDEA amine**

E-GRADE[®] MDEA amine is a clear, viscous, hygroscopic tertiary amine with a mild ammoniacal odor.

APPLICATIONS E-GRADE[®] MDEA amine is primarily used to formulate strippers and cleaners for the electronics industry.

SALES SPECIFICATIONS

<u>Property</u>	<u>Specifications</u>	<u>Test Method*</u>
Appearance	Clear and substantially free of suspended matter	ST-30.1
Color, Pt-Co	125 max.	ST-30.12
Methyldiethanolamine, wt%	99.0 min.	ST-5.5
Water, wt%	0.5 max.	ST-31.53, 6
Metals, ppb		ICP-MS or GFAA
Aluminum (Al)	20 max.	
Antimony (Sb)	20 max.	
Arsenic (As)	20 max.	
Barium (Ba)	20 max.	
Boron (B)	20 max.	
Cadmium (Cd)	20 max.	
Calcium (Ca)	20 max.	
Chromium (Cr)	20 max.	
Cobalt (Co)	20 max.	
Copper (Cu)	20 max.	
Gallium (Ga)	20 max.	
Germanium (Ge)	20 max.	
Gold (Au)	20 max.	
Iron (Fe)	20 max.	
Lead (Pb)	20 max.	
Lithium (Li)	20 max.	
Magnesium (Mg)	20 max.	
Manganese (Mn)	20 max.	
Nickel (Ni)	20 max.	
Potassium (K)	20 max.	
Silver (Ag)	20 max.	
Sodium (Na)	20 max.	
Strontium (Sr)	20 max.	
Tantalum (Ta)	20 max.	
Tin (Sn)	20 max.	
Titanium (Ti)	20 max.	
Zinc (Zn)	20 max.	

*Methods of Test are available from Huntsman Corporation upon request.

ADDITIONAL INFORMATION**Regulatory Information**

See SDS for all regulatory information.

Typical Properties

Boiling point, °C (°F)	243 (470)
Flash point, CC, °C (°F)	138 (280)
Melting point, °C (°F)	-21 (-6)
pH	11.5
Specific gravity, 20/20°C	1.04
Vapor pressure, mm Hg, 40°C (104°F)	0.021
Viscosity, cP, 25°C (77°F)	75
Water solubility	> 10 [Soluble]

TOXICITY AND SAFETY

For additional information on the toxicity and safe handling of this product, consult the Safety Data Sheet prior to use of this product.

HANDLING AND STORAGE

E-GRADE[®] MDEA amine may be satisfactorily stored in stainless steel tanks using stainless steel pipes and pumps.

For longer term color stability, it is recommended that the product be stored under an inert atmosphere.

Low pressure steam coils in storage tanks and heat tracing of transfer lines should be provided in cases where low environmental temperatures may make pumping of the product difficult.

BIODEGRADABILITY AND ENVIRONMENTAL SAFETY

E-GRADE[®] MDEA amine undergoes moderate biodegradation and is not expected to be persistent in the environment.

5323-0315

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