MONOETHANOLAMINE

STRUCTURE

H₂N-CH₂CH₂OH

DESCRIPTION

A clear, water-white, hygroscopic liquid with a mild ammoniacal odor.

APPLICATIONS

A chemical intermediate in the manufacture of cosmetics, surface-active agents, emulsifiers, pharmaceuticals, and plasticizing agents; a gas-scrubbing agent for the absorption and removal of H₂S and CO₂ from refinery and natural gas streams; carbon dioxide and ammonia manufacturing.

SALES SPECIFICATIONS

<table>
<thead>
<tr>
<th>Property</th>
<th>Specifications</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear and substantially free of suspended matter</td>
<td>ST-30.1</td>
</tr>
<tr>
<td>Color, Pt-Co</td>
<td>15 max.</td>
<td>ST-30.12</td>
</tr>
<tr>
<td>Diethanolamine, wt%</td>
<td>0.1 max.</td>
<td>ST-35.183</td>
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<tr>
<td>Monoethanolamine, wt%</td>
<td>99.5 min.</td>
<td>ST-35.183</td>
</tr>
<tr>
<td>Water, wt%</td>
<td>0.3 max.</td>
<td>ST-31.53, 6</td>
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</tbody>
</table>

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

ADDITIONAL INFORMATION

Chemical Properties

Molecular Weight 61.08
pH 11.8

Regulatory Information

DOT/TDG Classification Ethanolamine
Hazard Class 8, UN 2491 Packing Group III Corrosive
HMIS Code 3-1-0
CAS Number 141-43-5
TSCA Inventory Yes
WHMIS Classification E, D2B
Canadian DSL Yes

Typical Values

Boiling Point, 760 mm Hg, °F/°C 339/171
Flash Point, PMCC, °F/°C 204/96
Melting Point, °F/°C 51/11
Specific Gravity, 20/20°C 1.0179
Vapor Pressure, mm Hg, 20°C (68°F) 1
Weight, lb/gal, 20°C (68°F) 8.47
TOXICITY AND SAFETY
For information on the toxicity and safe handling of this product, please read the Material Safety Data Sheet prior to use of the product.

HANDLING AND STORAGE
Monoethanolamine may be satisfactorily stored in carbon steel, stainless steel, or aluminum tanks using steel pipes and pumps. Caution must be exercised, however, to keep the material in the anhydrous state to prevent severe corrosion to the carbon steel or aluminum tank and related equipment. A drier on the breathing nozzle is recommended to help maintain anhydrous conditions in the storage tank.

For longer term color stability, it is recommended that the product be stored under an inert atmosphere. Solid sediment may form upon standing. There should be circulation in the storage vessel to keep solids suspended.

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.

SHIPPING DATA
Product is available in tank cars, tank wagons and drums. Small samples are available by contacting our sample department at 1-800-662-0924.

BIODEGRADABILITY AND ENVIRONMENTAL SAFETY
Monoethanolamine undergoes moderate biodegradation and is not expected to be persistent in the environment.