JEFFAMINE® SD-2001 Polyetheramine

JEFFAMINE SD-2001 polyetheramine is useful in coatings and polymer applications. It is a liquid difunctional amine, with each amine being secondary. The secondary amine groups provide for a much slower reaction compared to primary amine groups. The product is TSCA Listed for sale in the U.S. and may be immediately available in other countries due to various polymer exemptions.

APPLICATIONS
- Chain extender for polyureas and polyurethanes
- Isocyanate prepolymer formation

BENEFITS
- Low color and viscosity
- Slower reacting than primary amines
- Gives lower viscosity isocyanate prepolymer

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>110 max.</td>
<td>ST-30.12</td>
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<tr>
<td>Primary amine, %</td>
<td>5 max.</td>
<td>ST-5.34</td>
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<tr>
<td>Total amine, meq/g</td>
<td>0.875 – 1.03</td>
<td>ST-5.22</td>
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<tr>
<td>Water, wt%</td>
<td>0.20 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

Physical Properties
- AHEW (Amine hydrogen equivalent wt.), g/eq: 1025
- Equivalent wt. with isocyanates, g/eq: 1025
- Flash point, PMCC, °C (°F): 149 (300)
- Boiling point, °C (°F): >250 (>482)
- Density, g/ml (lb/gal), 25°C: 0.978 (8.15)
- Viscosity, cSt, 25°C (77°F): 209
- pH: 11.8

Regulatory Information
- DOT/TDG Classification: Amines, liquid, corrosive, n.o.s. (N,N’-bis(2-propyl)polyoxypropylenediamine)
- HMIS Code: 3-1-0
- CAS Number: 81455-53-0, 9046-10-0
- TSCA Inventory: Listed
- WHMIS Classification: E
- Canadian DSL: Not Listed
- EINECS/ELINCS Classification: Polymer Exempt
- Australia, AICS: Not Listed
- Japan, ENCS: Contact Huntsman Regulatory
- China, IECSC: Not Listed
TOXICITY AND SAFETY
For additional information on the toxicity and safe handling of this product, consult the Material Safety Data Sheet (Safety Data Sheet in Europe) prior to use of this product.

HANDLING AND STORAGE
Materials of Construction
At temperatures of 75-100°F (34-38°C)
- Tanks: Carbon steel
- Lines, valves: Carbon steel
- Pumps: Carbon steel
- Heat exchange Surfaces: Stainless steel
- Hoses: Stainless steel, polyethylene, polypropylene, and TEFLON®
- Gaskets, packing: Polypropylene or TEFLON® (elastomers such as neoprene, Buna N, and VITON® should be avoided)
- Atmosphere: Nitrogen or dry air

At temperatures above 100°F (38°C)
- Tanks: Stainless steel or aluminum
- Lines, Valves: Stainless steel
- Pumps: Stainless steel or Carpenter 20 equivalent
- Atmosphere: Nitrogen

JEFFAMINE® SD-2001 polyetheramine may be stored under air at ambient temperatures for extended periods. A nitrogen blanket is suggested for all storage, however, to reduce the effect of accidental exposure to high temperatures and to reduce the absorption of atmospheric moisture and carbon dioxide. It should be noted that pronounced discoloration is likely to occur at temperatures above 140°F (60°C), whatever the gaseous pad.

Cleanout of lines and equipment containing JEFFAMINE SD-2001 polyetheramine can be accomplished using warm water and steam. In the event of spillage of this product, the area may be flushed with water. The proper method for disposal of waste material is by incineration with strict observance of all federal, state, and local regulations.

AVAILABILITY
Samples are available in North America and Asia by contacting our sample department at 1-800-662-0924. Samples in other locations, including Europe, are available by contacting any Huntsman Corporation sales office.