**Technical Bulletin**

**XTJ-578**

**XTJ-578** is a polyetherdiamine of about 2000 molecular weight with a lower level of unconverted hydroxyl groups than the standard JEFFAMINE® D-2000 polyetheramine. It is thus more suitable for reactions such as condensation polymerizations where a high level of amine difunctionality is beneficial. The polyether backbone contributes flexibility to polymers.

**APPLICATIONS**
- Polymerizations benefiting from high amine difunctionality

**BENEFITS**
- Faster reactions in some cases
- Flexibility from polyether backbone

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**SALES SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Specifications</th>
<th>Test Method*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, 25°C</td>
<td>Colorless to pale yellow liquid with slight haze permitted</td>
<td>ST-30.1</td>
</tr>
<tr>
<td>Color, Pt-Co</td>
<td>40 max.</td>
<td>ST-30.12</td>
</tr>
<tr>
<td>Primary amine, % of total amine</td>
<td>98 min.</td>
<td>ST-5.34</td>
</tr>
<tr>
<td>Total acetylatables, meq/g</td>
<td>0.95 – 1.05</td>
<td>ST-31.39</td>
</tr>
<tr>
<td>Total amine, meq/g</td>
<td>0.94 – 1.04</td>
<td>ST-5.35</td>
</tr>
<tr>
<td>Total amine, % of total acetylatables</td>
<td>98 min.</td>
<td>Calculated</td>
</tr>
<tr>
<td>Water, wt%</td>
<td>0.25 max.</td>
<td>ST-31.53, 6</td>
</tr>
</tbody>
</table>

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

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**ADDITIONAL INFORMATION**

**Regulatory Information**
- DOT/TDG Classification: Amines, liquid, corrosive, N.O.S. (polyoxypropylenediamine)
- HMIS Code: 3-1-0
- CAS Number: 9046-10-0
- US, TSCA Listed
- Canadian WHMIS Classification: D1B, E
- Canada, DSL Listed
- European Union, EINECS/ELINCS Polymer Exempt
- Australia, AICS Listed
- Japan, ENCS Listed
- Korea, ECL Listed
- China, IECSC Listed

**Typical Properties**
- AHEW (Amine hydrogen equivalent wt.), g/eq: 500
- Viscosity, cSt, 25°C (77°F): 248
- Density, g/ml (lb/gal), 25°C: 0.991 (8.26)
- Flash point, PMCC, °C (°F): >93.3 (>200)
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 TEFLO®
- Gaskets, packing: Polypropylene or TEFLO® (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

1 Registered trademark of Dupont

XTJ-578 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 XTJ-578 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.

www.huntsman.com