

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

SALES SPECIFICATIONS

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

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

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 TEFLON ^{®1}
Gaskets, packing	Polypropylene or TEFLON ^{®1} (elastomers such as neoprene, Buna N, and VITON ^{®1} 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.

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