

# **Technical Bulletin**

# JEFFAMINE® M-600 Polyetheramine

**JEFFAMINE M-600** polyetheramine is a 600 molecular weight polypropylene glycol monoamine, with methoxyethyl termination at the other end. The propylene oxide/ethylene oxide (PO/EO) mol ratio is 9/1. Polyetheramines of this type are useful in a variety of polymers because of the flexibility imparted by polyether groups.

**APPLICATIONS** 

- · Molecular weight control in polyamides
- Preparation of comb polymers with poly(acrylic acid) or similar linear polymers
- Preparation of epoxy resin adducts

**BENEFITS** 

- Improved flexibility from polyether
- · Amine end group more reactive than alcohol

# **SALES SPECIFICATIONS**

<u>Property</u>	<u>Specifications</u>	Test Method*
Appearance	Colorless to light yellow with slight haze	ST-30.1
Color, Pt-Co	75 max.	ST-30.12
Primary amine, % of total amine	95 min.	ST-5.34
Total acetylatables, meq/g	1.65 – 1.85	ST-31.39
Total amine, meq/g	1.58 – 1.79	ST-5.22
Water, wt%	0.35 max.	ST-31.53, 6

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

# ADDITIONAL INFORMATION

Regulatory Inform	<u>ation</u>	
DOT/TDG Classifica	ation	See MSDS
HMIS Code		2-1-0
CAS Number		83713-01-3
US, TSCA		Listed
Canadian WHMIS (	Classification	D1B, D2B
Canada, DSL		Listed
European Union, EIN	ECS/ELINCS	Polymer Exempt
Australia, AICS		Not Listed
Japan, ENCS	Contact Hunt	tsman Regulatory
Korea, ECL		Listed
China, IECSC		Listed

Typical Properties

AHEW (Amine hydrogen equivalent wt.), g/eq 291
Density, g/ml (lb/gal), 25°C 0.979 (8.17)
Flash point, PMCC, °C (°F) 129 (265)
pH 12
Melting point, °C (°F) -40 (-40)



#### **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

Stainless steel, polyethylene, polypropylene, and TEFLON®

Polypropylene or TEFLON® (elastomers such as neoprene, Buna N, and Gaskets, packing

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® M-600 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 M-600 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**

JEFFAMINE M-600 polyetheramine is available in 55-gallon (208L) drums of 420 pounds (205kg) net weight and 5-gallon (19L) cans. Larger quantities and bulk shipments are available with sufficient lead time. 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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