

## Technical Bulletin

# JEFFAMINE<sup>®</sup> M-3085 Amine

**JEFFAMINE<sup>®</sup> M-3085 Amine** is a hydrophilic polyether amine based on copolymer of EO/PO backbone. JEFFAMIN M-3085 Amine is a monofunctional with primary amine. It is a white, waxy solid at room temperature, with a moderate viscosity and a low vapor pressure.

- APPLICATIONS**
- Modification of epoxy resins and other thermoset resins.
  - Preparation of epoxy resin adducts.
  - Preparation of comb polymers with poly(acrylic acid) or similar linear polymers
  - Formulating emulsifiers, pressure sensitive adhesives, and corrosion inhibitors

- BENEFITS**
- Improved flexibility from polyether backbone
  - Water soluble.
  - Increased surface energy (hydrophilicity and polarity) from polyethylene glycol backbone
  - Surfactant properties to modify a variety of resin types
  - Amine end group more reactive than alcohol

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### SALES SPECIFICATIONS

<u>Property</u>	<u>Specifications</u>	<u>Test Method*</u>
Appearance, 60°C	Colorless to pale yellow liquid with slight haze permitted	ST-30.1
Color, Pt-Co	100 max.	ST-30.12
Conversion, total amine as % of total acetylatables	92 min.	Calculated
Primary amine, % of total amine	96 min.	ST-5.34
Total acetylatables, meq/g	0.33 – 0.40	ST-31.39
Total amine, meq/g	0.31 – 0.38	ST-5.35
Water, wt%	0.3 max.	ST-31.53, 6

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

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### ADDITIONAL INFORMATION

#### Regulatory Information

See SDS for all regulatory information.

#### Shelf Life

The product should retain its conformance to sales specifications for a period of at least two years from date of manufacture if the product is stored at less than 100°F (38°C) in its undamaged, unopened, factory packaged container.

In general, the user should determine the suitability of any chemical compound, no matter what the shelf life or length of time of storage. Each user should conduct a sufficient investigation to establish the suitability of any product for his intended use.

#### Typical Properties

Flash point, PMCC, °C (°F)	243 (469)
Melting point, °C (°F)	36 (96.8)
Density, g/ml, 25°C (77°F)	1.000
Weight, lb/US gallon, 25°C (77°F)	8.3
pH	10.9

## TOXICITY AND SAFETY

For additional information on the toxicity and safe handling of this product, consult the Safety Data Sheet prior to use of this product.

## HANDLING AND STORAGE

### Materials of Construction

#### At temperatures of 75-100°F (24-38°C) Tanks

	Carbon steel
Lines, valves	Carbon steel
Pumps	Carbon steel
Heat exchange Surfaces	Stainless steel
Hoses	Stainless steel, polyethylene, polypropylene, and TEFLON <sup>®1</sup> polymer
Gaskets, packing	Polypropylene or TEFLON <sup>®1</sup> polymer (elastomers such as neoprene, Buna N, and VITON <sup>®1</sup> elastomers 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

<sup>1</sup> Registered trademark of The Chemours Company

JEFFAMINE<sup>®</sup> M-3085 amine may be stored under air at ambient temperatures for extended periods. A nitrogen blanket is suggested for all storage 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<sup>®</sup> M-3085 amine can be accomplished using warm water and steam.

## AVAILABILITY

JEFFAMINE<sup>®</sup> M-3085 amine is available in bulk quantities. Small evaluation samples can be obtained by contacting any Huntsman Performance Products sales office.

Technical Data Sheets are updated frequently. Please ensure that you have a current copy.

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