

Technical Bulletin

JEFFAMINE[®] M-2095 Amine

JEFFAMINE M-2095 Amine is a hydrophilic polyether amine based on copolymer of EO/PO backbone. JEFFAMIN M-2095 Amine is a monofunctional with primary amine. It is a white, waxy solid at room temperature, with a moderate viscosity, low vapor pressure, and low color.

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 polyethyleneglycol backbone
- Surfactant properties to modify a variety of resin types
- Amine end group more reactive than alcohol

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	150 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	0.46 – 0.53	ST-31.39
Total amine, meq/g	0.43 – 0.51	ST-5.35
Water, wt%	0.5 max.	ST-31.53, 6

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

ADDITIONAL INFORMATION

Regulatory Information

See MSDS for all regulatory information.

Typical Properties

Flash point, PMCC, °C (°F)	232 (449)
Melting point, °C (°F)	45 (113)
Density, g/ml, 25°C (77°F)	1.100
Weight, lb/US gallon, 25°C (77°F)	9.2
Viscosity, cSt, 65.6°C (150°F)	86
pH	12.4

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 (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 ^{®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

JEFFAMINE[®] M-2095 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[®] M-2095 amine 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 by contacting our sample department at 1-800-662-0924. In other regions, samples can be obtained by contacting any Huntsman Corporation sales office.

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

ATC0082-0518

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