

## **Technical Bulletin**

# **JEFFAMINE® EDR-148 Polyetheramine**

**JEFFAMINE EDR-148** polyetheramine is a symmetrical, unhindered diamine. Like other JEFFAMINE polyetheramines, it imparts flexibility and toughness to thermoset polymers. However, JEFFAMINE EDR-148 polyetheramine is unique in that it is much more reactive than the JEFFAMINE D, T, and ED series amines.

$$H_2N$$
 $O$ 
 $O$ 
 $NH_2$ 

**APPLICATIONS** 

- · Epoxy curing agent
- Monomer for polyamides

**BENEFITS** 

- Can be formulated to cure at room temperature
- Rapid cure at elevated temperatures
- Excellent thermal shock resistance in cured epoxies

## **SALES SPECIFICATIONS**

<u>Property</u>	<u>Specifications</u>	<u>Test Method</u> *
Appearance	Colorless to pale yellow liquid with	ST-30.1
	slight haze permitted	
Color, Pt-Co	50 max.	ST-30.12
TEGDA, area%	97 min.	ST-35.143
(Triethyleneglycol diamine		
Total amine, meq/g	12.7 min.	ST-5.35
Water, wt%	0.35 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. (Triethylene glycol diamine) **HMIS Code** 3-1-0 **CAS Number** 929-59-9 US, TSCA Listed Canadian WHMIS Classification D2B. E Canada, DSL Not Listed European Union, EINECS/ELINCS Listed Australia, AICS Listed Japan, ENCS Contact Huntsman Regulatory Korea, ECL Listed China, IECSC Not Listed

#### Typical Physical Properties

AHEW (Amine hydrogen equivalent v	wt.), g/eq	37
Viscosity, cSt, 25°C (77°F)		8
Density, g/ml (lb/gal), 25°C	0.998 (8	3.32)
Flash point, PMCC, °C (°F)	129 (	265)
pH		11.6



#### **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 $^{\otimes 1}$  Polypropylene or TEFLON $^{\otimes 1}$  (elastomers such as neoprene, Buna N, and Gaskets, packing

VITON<sup>®1</sup> 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® EDR-148 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 EDR-148 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**

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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