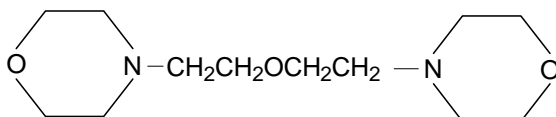


## Technical Bulletin

# JEFFCAT<sup>®</sup> DMDEE Catalyst

**JEFFCAT<sup>®</sup> DMDEE catalyst** is a high-boiling amine that can be used in flexible polyester foams, HR molded foams, and moisture-cured foams and coatings.



### APPLICATIONS

JEFFCAT DMDEE catalyst is a good blowing catalyst that does not cause cross-linking. When used in moisture-cured systems, it provides a stable prepolymer with a rapid cure. It can also be used in flexible polyester-based urethane foams, as well as semiflexible foams and HR molded foams.

### SALES SPECIFICATIONS

Property	Specifications	Test Method*
Appearance	Clear amber liquid substantially free of suspended matter	ST-30.1
Total amine, meq/g	8.1 – 8.5	ST-5.22
Water, wt%	0.10 max.	ST-31.53, 6

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

### ADDITIONAL INFORMATION

Regulatory Information		Typical Physical Properties	
DOT/TDG Classification	Not regulated	Color	Amber
HMIS Code	2-1-0	Flash point, PMCC, °C (°F)	166 (330)
WHMIS Classification	D2B	Freezing point, °C	-28
CAS Number	6425-39-4	Initial Boiling point, °C	309
<b>Chemical Control Laws</b>		pH	10.3
		Specific gravity, 20/20°C	1.06
		Vapor pressure, mm Hg, 20°C	< 1
		Viscosity, cSt, 15.5°C (60°F)	29
		VOC Content (%) by ASTM D 2369	76
		Water solubility (%)	> 10
Canada, DSL	Listed		
United States, TSCA	Listed		

### TOXICITY AND SAFETY

JEFFCAT DMDEE catalyst should be handled with care, as it is considered to be moderately irritating to the eyes and skin. The dermal and ocular Draize scores in rabbits have been determined to be 2.7/8.0 and 22.5/110, respectively.

JEFFCAT DMDEE catalyst is considered to be slightly toxic following a single oral exposure, based on an oral LD<sub>50</sub> in rats of 2.025 g/kg, and practically nontoxic following a single dermal exposure, based on a dermal LD<sub>50</sub> value of 3.038 g/kg in rabbits.

The dermal and respiratory sensitization properties of JEFFCAT DMDEE catalyst have not been investigated, but inhalation of vapors or mist may be irritating to the mucous membranes of the nasal cavity, throat, and upper respiratory tracts. In a study involving exposure of rats to a saturated atmosphere (21 ppm) of JEFFCAT DMDEE catalyst for eight hours, no mortality was observed. Due to the low vapor pressure of this material, inhalation exposure should be minimal.

When handling JEFFCAT DMDEE catalyst, chemical-type goggles must be worn. (Contact lenses should not be used.) Gloves resistant to chemicals and petroleum distillates are required. Protective clothing such as uniforms, coveralls, or lab coats should be worn and laundered or dry cleaned when soiled.

Should eye contact occur, flush eyes with copious amounts of water for at least 15 minutes and get immediate medical attention. For skin contact, remove contaminated clothing and wash exposed areas thoroughly with soap and water. If drenched, remove contaminated clothing under a safety shower. If inhaled, remove individual to fresh air. If breathing has stopped, apply artificial respiration, and get immediate medical attention.

## HANDLING AND STORAGE

JEFFCAT DMDEE catalyst is a high-quality amine product which performs in urethane formulations when properly stored and handled. Please refer to our bulletin on "Storage and Handling of JEFFCAT® Catalysts" and the Material Safety Data Sheet on this product for necessary information.

## MOISTURE CURE ELASTOMERS

Moisture cure elastomers are finding increased use applications as adhesives, glues, hard set polymers and coatings. These systems are typically single component and require excellent stability of the JEFFCAT amine catalyst with the isocyanate. Below are some simple examples illustrating moisture cure elastomers.

### Isocyanate (Quasi-Prepolymer) A

ISONATE® 143L <sup>1</sup>	60
JEFFOL® PPG-2000 <sup>2</sup>	40

### Isocyanate (Quasi-Prepolymer) B

m-TMXDI <sup>®3</sup>	55
JEFFAMINE® D-2000 <sup>2</sup>	45
Polyether Amine	

### Elastomers

Isocyanate A	50	50	—
Isocyanate B	—	—	50
JEFFSOL® PC <sup>2</sup>	15.0	15.0	—
JEFFCAT® DMDEE	0.5	5.0	5.0
Film cure, sec	90	20	60

<sup>1</sup>Product of Dow Chemical Co.

<sup>2</sup>Product of Huntsman Corp.

<sup>3</sup>Product of Cytec.

## AVAILABILITY

JEFFCAT DMDEE catalyst is available in 55-gallon drums with a net weight of 460 pounds and one-way totes with a net weight of 2,070 pounds. Samples are available by contacting our sample department at 1-800-662-0924.

### Huntsman Corporation

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(281) 719-6000

### Huntsman Advanced Technology Center

#### Technical Service

8600 Gosling Rd.  
The Woodlands, TX 77381  
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Samples 1-800-662-0924

[www.huntsman.com](http://www.huntsman.com)

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**Warning:** Polyurethane products manufactured from these chemicals may present a fire hazard if improperly used. Each manufacturer and user of such products should determine whether there are potential hazards in a specific application and take the necessary precautions.

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