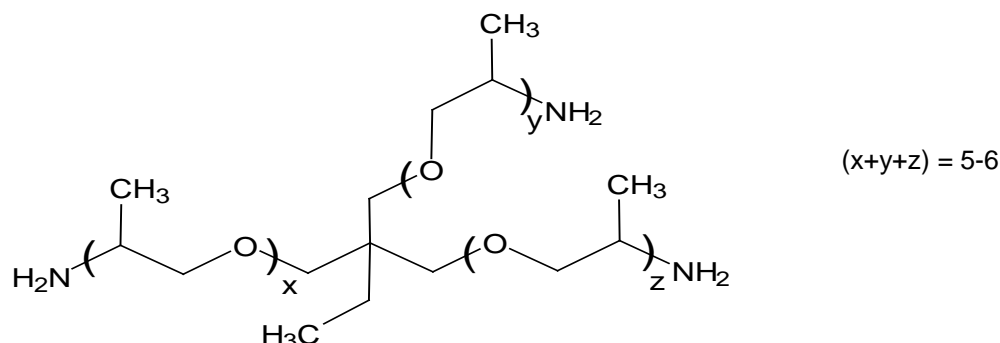


Technical Bulletin**JEFFAMINE® T-403 Polyetheramine**

JEFFAMINE® T-403 polyetheramine is characterized by repeating oxypropylene units in the backbone. As shown by the structure, JEFFAMINE® T-403 is a trifunctional primary amine having an average molecular weight of approximately 440. Its amine groups are located on secondary carbon atoms at the ends of aliphatic polyether chains.



- APPLICATIONS**
- Epoxy curing agent
 - Anti-sag agent for polyurethanes

- BENEFITS**
- Low color and vapor pressure
 - Completely miscible with a wide variety of solvents, including water
 - Improves flexibility and strength

SALES SPECIFICATIONS

<u>Property</u>	<u>Specifications</u>	<u>Test Method*</u>
Appearance	Colorless to pale yellow with slight haze	ST-30.1
Color, Pt-Co	50 max.	ST-30.12
Primary amine, % of total amine	90 min.	ST-5.34
Total acetylatables, meq/g	6.5 - 7.1	ST-31.39
Total amine, meq/g	6.1 - 6.6	ST-5.35
Water, wt%	0.25 max.	ST-31.53, 6

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

ADDITIONAL INFORMATION**Regulatory Information**

CAS Number 39423-51-3
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 in its undamaged, unopened, factory packaged container.

Typical Properties

AHEW (amine hydrogen equivalent wt.), g/eq	81
Flash point, PMCC, °C (°F)	196 (385)
Density, g/ml (lb/gal), 25°C	0.978 (8.12)
pH, 5% aqueous solution	11.6
Refractive index, n _D ²⁰	1.46
Vapor Pressure, mmHg/°C	1/181
	5/207
Viscosity, cSt, 25°C (77°F)	72

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.

TOXICITY AND SAFETY

For 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 ^{®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

¹VITON[®] and TEFLON[®] are registered trademarks of The Chemours Company.

JEFFAMINE[®] T-403 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[®] T-403 polyetheramine can be accomplished using warm water and steam.

AVAILABILITY

JEFFAMINE[®] T-430 polyetheramine is available in bulk, in totes, and in drums of 440 pounds (200 kg) net weight. Small evaluation samples can be obtained by contacting any Huntsman Performance Products sales office.

Copyright © 2007, 2008, 2018 Huntsman Corporation or an affiliate thereof. All rights reserved.
JEFFAMINE[®] is a registered trademark of Huntsman Corporation or an affiliate thereof in one or more, but not all countries.

5209-0618

Huntsman Corporation warrants only that its products meet the specifications stated in the sales contract. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications. While all the information presented in this document is believed to be reliable and to represent the best available data on these products, HUNTSMAN MAKES NO WARRANTY OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT OF ANY THIRD PARTY, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND ANY USER OF PRODUCTS DESCRIBED HEREIN SHOULD CONDUCT A SUFFICIENT INVESTIGATION TO ESTABLISH THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE AND ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES. Products may be toxic and require special precautions in handling. For all products described herein, the user should obtain detailed information on toxicity, together with proper shipping, handling, and storage procedures, and should comply with all applicable safety and environmental standards. The behavior, hazards and/or toxicity of the products referred to in this publication in manufacturing processes and their suitability in any given end-use environment are dependent upon various conditions such as chemical compatibility, temperature, and other variables, which may not be known to Huntsman. It is the sole responsibility of the user of such products to evaluate the manufacturing circumstances and the final products under actual end-use requirements and to adequately advise and warn future purchasers and users thereof.

Main Offices US: Huntsman Corporation / 10003 Woodloch Forest Drive / The Woodlands, Texas 77380 / 281-719-6000
Technical Service US: 8600 Gosling Road / The Woodlands, Texas 77381 / 281-719-7780

Main Offices Europe: Huntsman Belgium BVBA / Everslaan 45 / B-3078 Everberg, Belgium / 32-2 -758-9211
Technical Service Europe: Technical Services Representative / Everberg Office

Main Offices Asia Pacific: Huntsman Performance Products / No. 455, Wen Jing Road / Minhang Development Zone / Shanghai 200245, P. R. China / 86-21-3357-6588
Technical Service Asia Pacific: Huntsman Chemistry R&D Center (Shanghai) Co. Ltd. / 479 Wen Jing Road, Min Hang Development Zone / Shanghai 200245, P. R. China / 86-21-2403-7090