

Tetrahydrofuran (THF)

Product Description

Tetrahydrofuran (THF) is an industrial solvent used in the plastics, pharmaceuticals, and specialty chemicals industries. The LYCRA Company THF is at least 99.95% pure with a small (approximately 0.01%) amount of butylated hydroxytoluene (BHT) added as an antioxidant.

Precautions

THF is extremely flammable. Before using THF in any application, users should review and understand the Safety Data Sheet.

Major Industrial Uses

Resin Solvent:

- PVC and CPVC pipe cement
- Magnetic tape manufacture
- Polyurethane fabric coatings

Reaction Solvent:

- Pharmaceutical and specialty chemicals
- Alkali metals, alkyl alkali and aryl alkali metal compounds
- Alkali metal, aluminum hydrides, and borohydrides
- Organics with limited solubility in alcohols, ketones, ethers, and esters
- Steroids

Intermediates:

- Manufacture of natural gas odorants
- Production of polytetramethylether glycols for polyurethanes and polyesters

Specifications

THF Specifications	
Appearance	Clear, colorless liquid
Purity % by weight	99.95 min.
Color APHA	10 max.
Water ppm	300 max.
Peroxide (calculated THF-hydroperoxide) ppm	10 max.
Stabilizer (BHT)* ppm	75 min. – 150 max.

* THF product also offered with 250 – 400 ppm (THF High BHT).

Typical Properties

THF: Typical Properties	
Specific gravity @ 20°C	0.90
Boiling point	66°C
Freezing point	-108.5°C
Liquid density @ 20°C	7.41 lb/gal
Vapor density (air = 1)	2.49
Evaporation rate (n-butyl acetate = 1)	8.0
Viscosity @ 20°C	0.48 cP (mPa-s)
Heat of evaporation @ bp	195 btu/lb
Specific heat, liquid @ 20°C	0.42 btu/lb-F
Coefficient of thermal expansion @ 10 – 20 ° C	0.00126
Flash point, TCC	-20°C
Solubility in water	100%
Odor	ethereal
Vapor pressure @ 20°C	130 mmHg

TERATHANE®

POLYETHER GLYCOL

The LYCRA Company innovates and produces fiber and technology solutions for the apparel and hygiene industries, as well as specialty chemicals used in the spandex and polyurethane value chains. Headquartered in Wilmington, Delaware, The LYCRA Company is recognized worldwide for its innovative products, technical expertise, and unmatched marketing support. The LYCRA Company owns leading consumer and trade brands: LYCRA®, LYCRA HyFit®, LYCRA® T400®, L by LYCRA®, COOLMAX®, THERMOLITE®, ELASSPAN®, SUPPLEX®, TACTEL®, and TERATHANE®. While The LYCRA Company's name is new, its legacy stretches back to 1958 with the invention of the original spandex yarn, LYCRA® fiber. Today, The LYCRA Company is focused on adding value to its customers' products by developing unique innovations designed to meet the consumer's need for comfort and lasting performance. For more information, visit connect.lycra.com and lycra.com.

NOTICE: The data and material presented were derived from internal studies and are provided for informational purposes only. The LYCRA Company does not provide any representation or warranty with respect to the standards used or applied in deriving such data and material, the statistical significance of such data and material or the reliability, accuracy or fitness of such data and material for any purpose whatsoever. All such data and material are the property of The LYCRA Company and nothing herein shall be construed as authorization or license to use, print or distribute any such data or material. The LYCRA Company disclaims any liability whatsoever with respect to the use of any of the data or material contained herein.

© 2020 The LYCRA Company. TERATHANE® is a trademark of The LYCRA Company.

Contact Information:

Americas

John Gorcyca
john-r.l.gorcyca-1@LYCRA.com
Phone: + 1-302-683-3074

Asia

Jason Shang
jason.shang@LYCRA.com
Phone: + 86-21-63876666-2228

Europe

Morteza Shirazi
morteza.shirazi@LYCRA.com
Phone: + 34-932-379-282