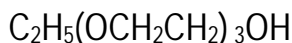




Ethoxytriglycol
Triethylene Glycol Monoethyl Ether



A low-volatility, high solvency glycol ether with excellent coupling properties

Introduction

The versatility of ethoxytriglycol, triethylene glycol monoethyl ether, is demonstrated by the variety of applications in which it may find use. Low volatility and excellent solvency make this glycol ether a highly effective carrier solvent for textile dye processes. With superior surface tension characteristics, water solubility and solvency for oils, it has potential for use in household, institutional, industrial and special-purpose cleaners. The coupling ability of this product enhances performance and improves shelf stability of cleaning products.

Physical properties†

Molecular weight (g/mol)		178.2
Boiling point	492°F	256°C
Flash point (1)	265°F	129°C
Freezing point	<-9°F	<-23°C
Vapor pressure@ 20°C — extrapolated		<0.01 mmHg
Specific gravity (20/20°C)		1.023
Density @ 20°C		8.52 lb/gal
Viscosity (@ 25°C, cP)		8.3
Surface tension (dynes/cm @ 25°C)		33.7 (neat product) 47.6 (25% aq. Solution) ⁽²⁾
Specific heat (J/g/°C @ 25°C)		1.78
Heat of vaporization (J/g) at normal boiling point		301.6
Net heat of combustion (kJ/g) — predicted @ 25°C		25.3
Autoignition temperature	530°F	277°C
Evaporation rate	(n-butyl acetate = 1.0)	<0.01
Solubility @ 20°C		
Solvent in water		100
Water in solvent		100
Hansen solubility parameters (J/cm ³) ^{1/2}		
_d (Dispersion)		16
_p (Polar)		7.8
_h (Hydrogen bonding)		9.7

Flammable limits (vol.% in air)

Lower	1.6
Upper	6.5

[†]The physical property data listed here are considered to be typical properties, not specifications.

[†]Pensky-Martens Closed Cup

[‡]Percent by weight: 25% product; 75% water.

Classification/Registry Numbers^{††}

CAS Number	112-50-5
AICS (Australia)	112-50-5
DSL (Canada)	112-50-5
ECL (Korea)	KE-13363 ^(†)
EINECS (EU)	203-978-9
MITI (Japan)	2-436
TSCA (U.S.)	112-50-5

[†]Korean Inventory of Chemicals

^{††} **NOTE:** Classifications apply only to this glycol ether product. It is the responsibility of the formulator to ensure that the final finished product complies with the regulations of a given country prior to its sale or distribution in that country.

Suggested Applications

- Active solvent for solvent-based coatings
- Dye carrier for textile dye processes
- Coupling agent and solvent in household and industrial cleaners, paint and floor polish strippers, hard surface cleaners, and disinfectants
- Chemical process solvent and intermediate for production of esters used as solvents surfactants and plasticizers
- Coupling agent for resins and dyes in water-based printing inks
- Component of high-boiling hydraulic brake fluids

Features

- Low Volatility
- Powerful solvency
- Coupling ability
- High boiling point
- Low vapor pressure
- Wide range of applications

NOTE: Consult the appropriate Material Safety Data Sheet for safety and handling guidelines for this product.

Product Stewardship

The Dow Chemical Company has a fundamental concern for all who make, distribute, and use our family of glycol ether products and the environment we share. This concern is the basis for our Product Stewardship philosophy, by which we assess all available information on our products and then take appropriate steps to protect employee and public health and the environment. In addition, Dow is committed to implementing the guiding principles and management practices of the chemical industry's Responsible Care[†] initiative, which includes Product Stewardship as one of the Management Practices. As part of our Product Stewardship effort, information such as Material Safety Data Sheets and literature on DOW glycol ethers are provided to assist customers in handling our glycol ether products in a safe and responsible manner.

[†] Service mark of The Chemical Manufacturer's Association

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