Technical Data Sheet

Ethoxytriglycol

Synonyms Triethylene glycol monoethyl ether.

Chemical Formula $C_2H_5(OCH_2CH_2)_3OH$

Sustainability Attribute:

Returna™ Advancing biodegradability with Dow

Product Description

Ethoxytriglycol is a low-volatility, high solvency glycol ether with excellent coupling properties. 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.

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 ester production used as solvents, surfactants and plasticizers.
- Coupling agent for resins and dyes in water-based printing inks.
- Component of high-boiling hydraulic brake fluids.

Typical Physical Properties

Properties	Unit	Result
Molecular weight	g/mol	178.2
Boiling point @ 760 mmhg, 1.01 ar	°C (°F)	256 (493)
Flash point, Setaflash closed cup	°C (°F)	129 (265)
Freezing point	°C (°F)	-19 (-2.2)
Vapor pressure @ 25°C — extrapolated	mmHg (kPa)	< 0.01 (0.001)
Specific gravity (20/20°C)		1.023
Liquid density @ 20°C	g/L (lb/gal)	1.02 (8.52)

Typical Physical Properties:
This data provided for those properties are typical values, and should not be construed as sales specifications.

Typical Physical Properties (Cont.)

Properties	Unit	Result
Vapor density (air = 1)	air = 1	6
Viscosity @ 20°C	cP or mPa•s	7.8
Surface tension @ 20°C	dynes/cm or mN/m	30.0 (neat product) 32.2 (25% aq sol'n)
Specific heat @ 25°C	J/g/°C	2.21
Heat of vaporization at normal boiling point	J/g	231.4
Net heat of combustion — predicted @25°C	kJ/g	28.7
Autoignition temperature	°C (°F)	202–210 (396–410)
Evaporation rate (n-butyl acetate = 1.0)		< 0.01
Solubility, % @ 25°C		
Solvent in water	%	100
Hansen solubility parameters	$(J/c^3)_{1/2}$	
_d (Dispersion)		16
_p (Polar)		7.8
_h (Hydrogen bonding)		9.7
Partition Coefficient, n-octonol/water	log Pow	-0.6
Flammable limits		
Lower	vol.% in air	1.0
Upper		6

Classification/ Registry Numbers/Country Inventory[1]

CAS#	112-50-5
AICS (Australia)	112-50-5
DSL (Canada)	112-50-5
IECSC (China)	112-50-5
ECI (Korea)	112-50-5/KE-13363
EINECS (EU)	203-978-9
MITI (Japan)	112-50-5
ENCS/IHSL (Japan)	2-436
NZIoC (New Zealand)	112-50-5
PICCS (Philippines)	112-50-5
TSCA (U.S.)	112-50-5

[1]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.

How Supplied

REGION	PACKAGING	TRANSPORT MODE
Europe/Africa	Bulk/Drum	Tank Truck
North America	Bulk/Drum	Tank Truck/Tank Car
Pacific	Bulk/Drum	Tank Truck

Product Stewardship

Dow encourages its customers and potential users to review their applications from the standpoint of human health and environmental aspects. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature, including Material Safety Data Sheets, should be consulted prior to the use.

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