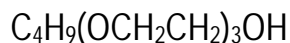




Butoxytriglycol
Triethylene Glycol Monobutyl Ether



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

Introduction

The versatility of Butoxytriglycol triethylene glycol monobutyl ether is demonstrated by the variety of applications in which it may find use. The low volatility and excellent solvency makes 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) | | 206.3 |
| Boiling point | 541°F ⁽³⁾ | 283°C ⁽³⁾ |
| Flash point ⁽¹⁾ | 280°F | 138°C |
| Freezing point | -38°F | -39°C |
| Vapor pressure@ 20°C | | <0.01 mmHg |
| Specific gravity (20/20°C) | | 0.989 |
| Density @ 20°C | | 8.24 lb/gal |
| Viscosity (@ 20°C cP) | | 10.9 |
| Surface tension (dynes/cm @ 25°C) | | 30.0 (neat product) 32.2 (25% aq. Solution) ⁽²⁾ |
| Specific heat (J/g°C @ 25°C) | | 2.21 |
| Heat of vaporization (J/g) at normal boiling point | | 231.4 |
| Net heat of combustion (kJ/g) — predicted @ 25°C | | 28.7 |
| Autoignition temperature | 603°F | 317°C |
| Evaporation rate | (n-butyl acetate = 1.0) | <0.01 |
| Solubility @ 20°C by weight | | |
| Solvent in water | | 100 |
| Water in solvent | | 100 |
| Hansen solubility parameters (J/cm ³) ^{1/2} | | |
| _d (Dispersion) | | 16.2 |
| _p (Polar) | | 7.0 |
| _h (Hydrogen bonding) | | 7.4 |
| Flammable limits (vol.% in air) | | |
| Lower | | -- |
| Upper | | -- |

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

¹ Pinsky-Martens Closed Cup unless otherwise noted.

² Percent by weight: 25% product; 75% water.

³ Decomposes at 760 mmHg, boiling point extrapolated.

Classification/Registry Numbers††

| | |
|------------------|-------------------------|
| CAS Number | 143-22-6 |
| AICS (Australia) | 143-22-6 |
| DSL (Canada) | 143-22-6 |
| ECL (Korea) | KE-04140 ⁽¹⁾ |
| EINECS (EU) | 205-592-6 |
| MITI (Japan) | 2-436 ⁽²⁾ |
| TSCA (U.S.) | 143-22-6 |

¹Korean Inventory of Chemicals

²Japanese Inventory (ENCS)

†† **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 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.

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.

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Published March 2004

