



BUTYL CELLOSOLVE™

Ethylene Glycol Monobutyl Ether



Description

A fast-evaporating glycol ether with an excellent balance of hydrophilic and hydrophobic character; excellent active solvency and coupling properties

Introduction

Butyl CELLOSOLVE glycol ether is a very versatile solvent product with a good balance of many different properties. With a nearly equal balance of hydrophobic and hydrophilic character, Butyl CELLOSOLVE glycol ether provides excellent performance in coatings, cleaners, and many other types of products. It is one of our fastest evaporating glycol ethers. Butyl CELLOSOLVE glycol ether is compatible with a wide range of resin types, and it also offers 100% water solubility.

Typical Physical Properties

These properties are typical but do not constitute specifications.

Molecular weight (g/mol)		118.2
Boiling point @ 760 mmHg, 1.01 bar	340°F	171°C
Flash point	149°F	65°C
Freezing point	-107°F	-77°C
Vapor pressure@ 20°C — extrapolated		0.66 mmHg 0.89 mbar
Specific gravity (25/25°C)		0.901
Density @ 20°C	7.53 lb/gal	0.902 g/cm ³
@ 25°C	7.49 lb/gal	0.898 g/cm ³
Viscosity (cP or mPa•s @ 25°C)		2.9
Surface tension (dynes/cm or mN/m @ 25°C)		27.4
Specific heat (J/g/°C @ 25°C)		2.38
Heat of vaporization (J/g) at normal boiling point		348
Net heat of combustion (kJ/g) — predicted @ 25°C		30.0
Autoignition temperature	471°F	224°C
Evaporation rate	n-butyl acetate = 1.0) (diethyl ether = 1.0)	0.079 154
Solubility, g/100 g @ 25°C		
Solvent in water		-
Water in solvent		-
Hansen solubility parameters (J/cm ³) ^{1/2}		
_d (Dispersion)		16.0
_p (Polar)		7.6
_h (Hydrogen bonding)		12.3
Flammable limits (vol.% in air)		
Lower (measured @ 170°C)		1.13
Upper (measured @ 180°C)		10.60

Classification/Registry Numbers††

CAS Number	111-76-2
AICS (Australia)	111-76-2
DSL (Canada)	111-76-2
ECL (Korea)	2-519
EINECS (EU)	203-905-0
MITI (Japan)	2-407
TSCA (U.S.)	111-76-2

†† 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.
- Coalescent for industrial water-based coatings.
- Coupling agent for architectural water-borne coatings.
- Coupling agent and solvent in household and industrial cleaners, rust removers, hard surface cleaners, and disinfectants.
- Primary solvent in solvent-based silk screen printing inks.
- Coupling agent for resins and dyes in water-based printing inks.
- Solvent for agricultural pesticides.

Features

- Powerful solvency
- Coupling ability
- Coalescing ability
- Moderate evaporation rate
- High dilution ratio
- Wide range of applications

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

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