



BUTYL CARBITOL™

Diethylene Glycol Monobutyl Ether



Description

A slow-evaporating, hydrophilic glycol ether with excellent coalescing and coupling power.

Introduction

Butyl CARBITOL glycol ether can be considered a slower-evaporating analog of Butyl CELLOSOLVE glycol ether. It can be used in combination with Butyl CELLOSOLVE glycol ether to lower the evaporation rate and increase the hydrophobicity of the solvent package. Yet Butyl CARBITOL glycol ether offers 100% water solubility.

Typical Physical Properties

These properties are typical but do not constitute specifications.

Molecular Weight (g/mol)		162.2
Boiling point @ 760 mmHg, 1.01 bar	446°F	230°C
Flash point	210°F	99°C
Freezing point	-90°F	-68°C
Vapor pressure@ 20°C — extrapolated		0.03 mmHg 0.04 mbar
Specific gravity (25/25°C)		0.951
Density @ 20°C	7.95 lb/gal	0.952 g/cm ³
@ 25°C	7.91 lb/gal	0.948 g/cm ³
Viscosity (cP or mPa•s @ 25°C)		4.9
Surface tension (dynes/cm or mN/m @ 25°C)		30.0
Specific heat (J/g/°C @ 25°C)		2.26
Heat of vaporization (J/g) at normal boiling point		276
Net heat of combustion (kJ/g) — predicted @ 25°C		28.7
Autoignition temperature	442°F	228°C
Evaporation rate	n-butyl acetate = 1.0 (diethyl ether = 1.0)	0.004 >1200
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)		7.0
_h (Hydrogen bonding)		10.6
Flammable limits (vol.% in air)		
Lower		0.85
Upper		24.60

Classification/Registry Numbers††

CAS Number	112-34-5
AICS (Australia)	112-34-5
DSL (Canada)	112-34-5
ECL (Korea)	2-204
EINECS (EU)	203-961-6
MITI (Japan)	2-422
TSCA (U.S.)	112-34-5

†† 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

- Latex coalescent in water-based architectural and industrial 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 solvent for resins and dyes in water-based printing inks.
- Solvent for ball point and felt tip pen inks, and textile dyeing and printing.
- Coalescent for latex adhesives.
- Deactivator, stabilizer for agricultural pesticides.

Features

- Powerful solvency
- Coalescing ability
- High dilution ratio
- Low evaporation rate
- Low viscosity
- Wide range of applications

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

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March 2004
Form No. 110-00624-0304