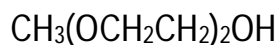




Methyl CARBITOL Diethylene Glycol Monomethyl Ether



A glycol ether with a moderate evaporation rate and excellent active solvency properties

Introduction

Methyl CARBITOL™ glycol ether is a very hydrophilic, slow-evaporating glycol ether. Its primary use is as a de-icing additive for aviation fuel. Methyl CARBITOL glycol ether can also be used in coalescing blends with other solvents where high polymer solvency and tailing activities are needed.

Physical properties†

Molecular weight (g/mol)		120.1
Boiling point @ 760 mmHg, 1.01 bar	381°F	194°C
Flash point	205°F	96°C
Freezing point	-92°F	-69°C
Vapor pressure@ 20°C — extrapolated		0.19 mmHg 0.25 mbar
Specific gravity (25/25°C)		1.020
Density @ 20°C	8.53 lb/gal	1.022 g/cm ³
@ 25°C	8.49 lb/gal	1.017 g/cm ³
Viscosity (cP or mPa.s @ 25°C)		3.5
Surface tension (dynes/cm or mN/m @ 25°C)		24.6
Specific heat (J/g°C @ 25°C)		2.30
Heat of vaporization (J/g) at normal boiling point		369
Net heat of combustion (kJ/g) — predicted @ 25°C		23.6
Autoignition temperature	464°F	240°C
Evaporation rate	(n-butyl acetate = 1.0) (diethyl ether = 1.0)	0.019 628
Solubility, g/100 g @ 25°C		
Solvent in water		∞
Water in solvent		∞
Hansen solubility parameters (J/cm ³) ^{1/2}		
_d (Dispersion)		16.2
_p (Polar)		7.8
_h (Hydrogen bonding)		12.6
Flammable limits (vol.% in air)		1.38
Lower		22.70
Upper		

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

Classification/Registry Numbers††

CAS Number	111-77-3
AICS (Australia)	111-77-3
DSL (Canada)	111-77-3
ECL (Korea)	2-340
EINECS (EU)	203-906-6
MITI (Japan)	2-422
TSCA (U.S.)	111-77-3

†† **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 silk screen printing inks.
- Solvent for stamp pad inks and ball point and felt tip writing pen inks.
- Solvent for pastes used in printing cellulose acetate and polyester fabrics.
- Solvent and coupling agent for vat dyeing fabrics.
- Solvent and coupling agent for rust removers, aluminum brighteners, and paint and varnish removers.
- Deactivator and stabilizer for agricultural pesticides.

Features

- Powerful solvency
- High dilution ratio
- Low evaporation rate
- Coupling ability
- Viscosity control
- Low surface tension
- 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

