



## METHYL CARBITOL™

### Diethylene Glycol Monomethyl Ether



#### Description

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.

#### Typical Physical Properties

These properties are typical but do not constitute specifications.

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 <sup>3</sup>
@ 25°C	8.49 lb/gal	1.017 g/cm <sup>3</sup>
Viscosity (cP or mPa•s @ 25°C)		3.5
Surface tension (dynes/cm @ 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 <sup>3</sup> ) <sup>1/2</sup>		
_d (Dispersion)		16.2
_p (Polar)		7.8
_h (Hydrogen bonding)		12.6
Flammable limits (vol.% in air)		
Lower		1.38
Upper		22.70

### 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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