ANDREA GALLO DI LUIGI S.r.l.u.
Company founded in 1892
Via Erzelli 9, 16152 Genova, Italy Tel. +39 (0)10 6502941
www.andreagallo.it

DPM DiMetossiPropanolo

Dipropylene Glycol Methyl Ether

$CH_3O[CH_2CH(CH_3)O]_2H$ (One of several isomers)

Description

A hydrophilic glycol ether with a moderate evaporation rate and excellent coupling abilities.

Introduction

DPM glycol ether is a mid-to slow evaporating solvent. This hydrophilic solvent has 100% water solubility and is ideally suited as a coupling agent in a wide range of solvent systems. DPM glycol ether has a higher flash point than DPM glycol ether making it easier to handle, store, and ship. Often incorporated into latex emulsion coatings DPM glycol ether can be used to prevent shocking
(coagulation of emulsion) when hydrophobic solvents are used. More broadly, its hydrophilic nature makes it an ideal coupling aid in water reducible coatings, and cleaning applications. DPM glycol ether's intermediate evaporation rate allow it to be used in a potentially wider range of systems than many other solvents.

Typical Physical Properties

These properties are typical but do not constitute specifications.

Molecular weight (g/mol)		148.2
Boiling point @ 760 mmHg, 1.01 bar	374°F	190°C
Flash point (Setaflash Closed Cup)	167°F	75°C
Freezing point	-117°F	-83°C
Vapor pressure@ 20°C — extrapolated		0.28 mmHg 0.37 mbar
Specific gravity (25/25°C)		0.951
Density @ 20°C @ 25°C	7.95 lb/gal 7.91 lb/gal	0.953 g/cm³ 0.948 g/cm³
Viscosity (cP or mPa•s @ 25°C)		3.7
Surface tension (dynes/cm or mN/m @ 25°C)		28.8
Specific heat (J/g/°C @ 25°C)		2.25
Heat of vaporization (J/g) at normal boiling point		267
Net heat of combustion (kJ/g) — predicted @ 25°C		27.2
Autoignition temperature	405°F	207°C
Evaporation rate	(n-butyl acetate = 1.0) (diethyl ether = 1.0)	0.035 351
Solubility, g/100 g @ 25°C Solvent in water Water in solvent		 - -
Hansen solubility parameters $(J/cm^3)^{1/2}$ _d (Dispersion) _p (Polar) _h (Hydrogen bonding)		 15.5 4.0 11.5
Flammable limits (vol.% in air) Lower (measured @ 100°C) Upper (measured @ 150°C)		 1.10 14.00

ANDREA GALLO DI LUIGI S.r.l.u.
Company founded in 1892
Via Erzelli 9, 16152 Genova, Italy Tel. +39 (0)10 6502941
www.andreagallo.it

Classification / Registry Numbers††

CAS Number	34590-94-8
AICS (Australia)	34590-94-8
DSL (Canada)	34590-94-8
ECL (Korea)	2-272
EINECS (EU)	252-104-2
MITI (Japan)	2-426
TSCA (U.S.)	34590-94-8

†† 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

- Coupling agent (often in blends) for water-based dilutable coatings.
- Active solvent for solvent-based coatings.
- Coupling agent and solvent in household and industrial cleaners, grease and paint removers, metal cleaners, and hard surface cleaners.
- Tail solvent for solvent-based gravure and flexographic printing inks.
- Primary solvent in solvent-based silk screen printing inks.
- Coupling agent in solvent blends for water-based gravure, flexographic, and silk screen printing inks.
- Coupling agent and solvent for vat dyeing fabrics.
- Mutual solvent, coupling agent, and emollient in cosmetic formulations.
- Stabilizer for agricultural herbicides.
- Coalescent for floor polishes and finishes

Features

- Powerful solvency
- Moderate evaporation rate
- Low viscosity
- High dilution ratio
- Low surface tension
- Coupling ability
- Wide range of applications

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

March 2004
Ed01.00