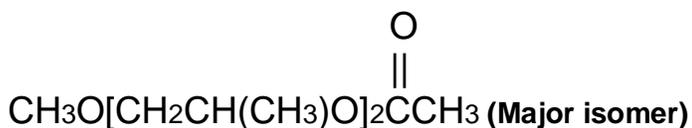




DOWANOL DPMA

Dipropylene Glycol Methyl Ether Acetate



A hydrophilic glycol ether with a moderate evaporation rate and tailing solvent activities

Introduction

DOWANOL* DPMA glycol ether provides many of the same properties as DOWANOL PMA glycol ether, but with a slower evaporation rate and a lower flammability rating. DOWANOL DPMA is rated as a Class III combustible, making it easier to handle, store, and ship. This product is among the lowest viscosity members of the family of DOWANOL glycol ethers. The molecule is capped with an acetate group, which reduces its polarity and reduces the solvent's viscosity. The acetate group also eliminates the presence of the reactive hydrogen found in other glycol ethers; thus, DOWANOL DPMA glycol ether is an excellent solvent choice for urethanes and other proton-sensitive systems. DOWANOL DPMA glycol ether provides excellent active solvency for a very wide range of resin types, including acrylics, epoxies, alkyds, polyesters, and many others.

Physical properties†

Molecular weight (g/mol)		190.2
Boiling point @ 760 mmHg, 1.01 bar	408°F	209°C
Flash point	187°F	86°C
Freezing point	-117°F	-25°C
Vapor pressure@ 20°C — extrapolated		0.08 mmHg 0.11 mbar
Specific gravity (25/25°C)		0.977
Density @ 20°C	8.17 lb/gal	0.979 g/cm ³
@ 25°C	8.13 lb/gal	0.974 g/cm ³
Viscosity (cP or mPas @ 25°C)		1.7
Surface tension (dynes/cm or mN/m @ 25°C)		27.3
Specific heat (J/g°C @ 25°C)		1.94
Heat of vaporization (J/g) at normal boiling point		241
Net heat of combustion (kJ/g) — predicted @ 25°C		25.4
Autoignition temperature	545°F	285°C
Evaporation rate	(n-butyl acetate = 1.0) (diethyl ether = 1.0)	0.015 791

Solubility, g/100 g @ 25°C	
Solvent in water	19 (16 wt %)
Water in solvent	3.5 (3.5 wt %)
Hansen solubility parameters (J/cm³)^{1/2}	
_d (Dispersion)	15.1
_p (Polar)	5.3
_h (Hydrogen bonding)	4.3
Flammable limits (vol.% in air)	
Lower (measured @ 150°C)	1.21
Upper (measured @ 150°C)	5.35

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

Classification/Registry Numbers††

CAS Number	88917-22-0
AICS (Australia)	88917-22-0
DSL (Canada)	88917-22-0
ECL (Korea)	9312-3155
EINECS (EU)	not registered
MITI (Japan)	not registered
TSCA (U.S.)	88917-22-0

†† **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.
- Active solvent for solvent-based silk screen printing inks.
- Tailing solvent for solvent-based coatings.

Features

- Powerful solvency
- Coalescing ability
- High dilution ratio
- Moderate evaporation rate
- Viscosity control

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

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Published March 2004

