

Product Name

DOWANOL™ PMA

Synonyms

Propylene glycol methyl ether acetate; 2-Methoxy-1-methylethyl acetate; 1-Methoxypropylacetate.

Chemical Formula

CH₃ O | || CH₃OCH₂CH-O-CCH₃ (major isomer)

Product Description

DOWANOL™ PMA glycol ether has the lowest viscosity of the entire line of DOWANOL™ glycol ethers (1.1 centipoise at 25°C), and it provides superb viscosity reduction. The remaining OH group in the glycol ether molecule is capped with an acetate group, which reduces its polarity and reduces the solvent's viscosity. The acetate group also eliminates the reactive hydrogen from the OH group found in other glycol ethers; thus, DOWANOL™ PMA glycol ether is an excellent solvent choice for urethanes and other proton-sensitive systems. DOWANOL™ PMA glycol ether is a relatively fast-evaporating glycol ether, and it sets a performance standard in high-solids, solvent-borne systems. It provides excellent active solvency for a very wide range of resin types, including acrylics, epoxies, alkyds, polyesters and many other.

Applications

- Active solvent for solvent-based coatings.
- Active solvent for solvent-based silk screen printing inks.
- Aprotic solvent in coating systems where OH reactivity is unwanted (e.g. PU/isocyanate and epoxy).

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	132.2
Boiling Point @ 760 mmHg, 1.01 ar	146 °C (295 °F)
Flash Point (Setaflash Closed Cup	45.5 °C (113.9 °F)
Freezing Point	-66 °C (-87°F)
Vapor pressure@ 20°C — extrapolated	2.8 mmHg
	355 Pa
Specific gravity (20/20°C)	0.964
Liquid Density @ 20°C	0.967 g/cm3
@ 25°C	0.963 g/cm3
Vapor Density (air = 1)	4.6
Viscosity (cP or mPa•s @ 25°C)	1.1
Surface tension (dynes/cm or mN/m @ 20°C)	26.9
Specific heat (J/g/°C @ 25°C)	1.85
Heat of vaporization (J/g) at normal boiling	296
point	

Form No. 110-00588-0812

Net heat of combustion (kJ/g) — predicted	23.8
@ 25°C	
Autoignition temperature	333 °C (631 °F)
Evaporation rate (n-butyl acetate = 1.0)	0.33
Solubility, g/100 or % @ 25°C	
Solvent in water	19.8%
Hansen solubility parameters	
(J/cm ³)1/2	
_d (Dispersion)	16.1
_p (Polar)	6.1
_h (Hydrogen bonding)	6.6
Partition Coefficient, n-octonol/water	1.2
(log Pow)	
Flammable limits (vol.% in air)	
Lower	1.5
Upper	7.0

Typical Physical Properties:

This data provided for those properties are typical values, and should not be construed as sales specifications.

Classification/Registry Numbers/Country Inventory@.

CAS#	108-65-6	
AICS (Australia)	108-65-6	
DSL (Canada)	108-65-6	
IECSC (China)	108-65-6	
ECI (Korea)	108-65-6/KE-23315	
EINECS (EU)	203-603-9	
MITI (Japan)	108-65-6	
ENCS/ISHL (Japan)	2-3144	
NZIoC (New Zealand)	108-65-6/HSR001219	
PICCS (Philippines)	108-65-6	
TSCA (U.S.)	108-65-6	

@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.

How Supplied

REGION	PACKAGING	TRANSPORT MODE
Europe/Africa	Bulk/Drum	Tank Truck
Latin America	Bulk/Drum	Tank Truck
North America	Bulk/Drum	Tank Truck/Tank Car
Pacific	Bulk/Drum	Tank Truck

Product Stewardship

Dow encourages its customers and potential users to review their applications from the standpoint of human health and environmental aspects. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature, including Material Safety Data Sheets, should be consulted prior to the use.



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