Technical Data Sheet

Product Name

DOWANOL™ DPMA

Synonyms

Dipropylene glycol methyl ether acetate.

Chemical Formula

$$CH_3O[CH_2CH(CH_3)O]_2\overset{\overset{\displaystyle O}{||}}{C}CH_3 \text{ (Major isomer)}$$

Product Description

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.

Applications

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

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	190.2
Boiling Point @ 760 mmHg, 1.01 ar	209 °C (408 °F)
Flash Point (Setaflash Closed Cup	87.5 °C (189.5 °F)
Freezing Point	-25 °C (-13°F)
Vapor pressure@ 20°C — extrapolated	0.08 mmHg 0.257 kPa
Specific gravity (25/25°C)	0.976
Liquid Density @ 20°C @ 25°C	0.979 g/cm3 0.974 g/cm3
Vapor Density (air = 1)	6.6
Viscosity (cP or mPa•s @ 25°C)	1.7
Surface tension (dynes/cm or mN/m @ 20°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	340 °C (644 °F)

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Evaporation rate (n-butyl acetate = 1.0)	0.015
Solubility, g/100 or % @ 20°C Solvent in water	18.3%
Hansen solubility parameters $(J/cm^3)^{1/2}$ _d (Dispersion) _p (Polar) _h (Hydrogen bonding)	 15.1 5.3 4.3
Partition Coefficient, n-octonol/water (log Pow)	0.61
Flammable limits (vol.% in air) Lower Upper	 1.21 5.35

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#	88917-22-0
AICS (Australia)	88917-22-0
DSL (Canada)	88917-22-0
IECSC (China)	88917-22-0
ECI (Korea)	88917-22-0
EINECS (EU)	406-880-6
MITI (Japan)	88917-22-0
ISHL (Japan)	2-6-1473
NZIoC (New Zealand)	88917-22-0
PICCS (Philippines)	88917-22-0
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.

How Supplied

REGION	PACKAGING	TRANSPORT MODE
Europe/Africa	Drum	Not Applicable
Latin America	Drum	Not Applicable
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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