

Technical Data Sheet



Product Name	DOWANOL™ PM																																				
Synonyms	Propylene glycol methyl ether; 1-Methoxy-2-propanol.																																				
Chemical Formula	$\text{CH}_3\text{OCH}_2\text{CHOHCH}_3$ (major isomer)																																				
Product Description	DOWANOL™ PM glycol ether is the fastest evaporating solvent in the DOWANOL™ glycol ether family. With very high water solubility and active solvency, DOWANOL™ PM glycol ether is widely used in coating and cleaning applications. It offers better viscosity reduction than heavier molecular weight glycol ethers and is particularly effective in epoxy and high solids acrylic systems. DOWANOL™ PM can also be used in combination with DOWANOL™ PnB glycol ether in glass cleaning formulations.																																				
Applications	<ul style="list-style-type: none">• Active solvent for solvent-based coatings.• Active and tail solvent for solvent based gravure and flexographic printing inks.• Coupling agent in solvent blends for water-based gravure, flexographic, and silk screen printing inks.• Carrier solvent for ball point and felt tip writing pen inks.• Coupling agent and solvent for household and industrial cleaners, rust removers, and hard surface cleaners.• Solvent for agricultural pesticides, deactivator and emollient for livestock pesticides.																																				
Typical Physical Properties	<table><thead><tr><th>Property</th><th>Value</th></tr></thead><tbody><tr><td>Molecular Weight (g/mol)</td><td>90.1</td></tr><tr><td>Boiling Point @ 760 mmHg, 1.01 ar</td><td>120 °C (248 °F)</td></tr><tr><td>Flash Point (Setaflash Closed Cup)</td><td>31 °C (88 °F)</td></tr><tr><td>Freezing Point</td><td>-96 °C (-141°F)</td></tr><tr><td>Vapor pressure@ 20°C — extrapolated</td><td>8.5 mmHg (1.56 kPa)</td></tr><tr><td>Specific gravity (25/25°C)</td><td>0.919</td></tr><tr><td>Liquid Density @ 20°C @ 25°C</td><td>0.921 g/cm³ 0.916 g/cm³</td></tr><tr><td>Vapor Density (air = 1)</td><td>3.1</td></tr><tr><td>Viscosity (cP or mPa·s @ 25°C)</td><td>1.7</td></tr><tr><td>Surface tension (dynes/cm or mN/m @ 20°C)</td><td>70.7</td></tr><tr><td>Specific heat (J/g/°C @ 25°C)</td><td>2.44</td></tr><tr><td>Heat of vaporization (J/g) at normal boiling point</td><td>435</td></tr><tr><td>Net heat of combustion (kJ/g) — predicted @ 25°C</td><td>24.7</td></tr><tr><td>Autoignition temperature</td><td>287 °C (549 °F)</td></tr><tr><td>Evaporation rate (n-butyl acetate = 1.0)</td><td>0.62</td></tr><tr><td>Solubility, g/100 g @ 25°C Solvent in water</td><td>Completely miscible</td></tr><tr><td>Hansen solubility parameters</td><td></td></tr></tbody></table>	Property	Value	Molecular Weight (g/mol)	90.1	Boiling Point @ 760 mmHg, 1.01 ar	120 °C (248 °F)	Flash Point (Setaflash Closed Cup)	31 °C (88 °F)	Freezing Point	-96 °C (-141°F)	Vapor pressure@ 20°C — extrapolated	8.5 mmHg (1.56 kPa)	Specific gravity (25/25°C)	0.919	Liquid Density @ 20°C @ 25°C	0.921 g/cm ³ 0.916 g/cm ³	Vapor Density (air = 1)	3.1	Viscosity (cP or mPa·s @ 25°C)	1.7	Surface tension (dynes/cm or mN/m @ 20°C)	70.7	Specific heat (J/g/°C @ 25°C)	2.44	Heat of vaporization (J/g) at normal boiling point	435	Net heat of combustion (kJ/g) — predicted @ 25°C	24.7	Autoignition temperature	287 °C (549 °F)	Evaporation rate (n-butyl acetate = 1.0)	0.62	Solubility, g/100 g @ 25°C Solvent in water	Completely miscible	Hansen solubility parameters	
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$(J/cm^3)^{1/2}$	
ω_d (Dispersion)	15.6
ω_p (Polar)	7.2
ω_h (Hydrogen bonding)	13.6
Partition Coefficient, n-octanol/water (log Pow)	0.37
Flammable limits (vol.% in air)	
Lower	1.48
Upper	13.7

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#	107-98-2
AICS (Australia)	107-98-2
DSL (Canada)	107-98-2
IECSC (China)	107-98-2
ECI (Korea)	107-98-2
EINECS (EU)	203-539-1
MITI (Japan)	107-98-2
ENCS/ISHL (Japan)	2-404
NZIoC (New Zealand)	107-98-2
PICCS (Philippines)	107-98-2
TSCA (U.S.)	107-98-2

@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

For More Information

North America: Toll-free 1-800-447-4369

Europe: Toll-free (+800) 3-694-6367

(+31) 11567-2626

Asia-Pacific: Toll-free (+800) 7776-7776

(+60) 3-7958-3392

Latin America: (+55) 11-5188-9222

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* International toll free from Austria, Belgium, Denmark, Finland (prefix 990), France, Germany, Hungary, Ireland, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom

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