

Technical Data Sheet



Product Name DOWANOL™ TPnB

Synonyms Tripropylene glycol n-butyl ether.

Chemical Formula $C_4H_9O[C_3H_6O]_2CH_2CHOHCH_3$

Product Description DOWANOL™ TPnB glycol ether is a very slow-evaporating, hydrophobic glycol ether with outstanding surface tension-lowering ability; ideal where high polymer solvency and residence time are required. DOWANOL™ TPnB is the slowest-evaporating member of the family of DOWANOL™ glycol ethers. DOWANOL™ TPnB is a high boiling, colorless solvent with low viscosity and practically no odor. Due to its length and hydrophobic structure, DOWANOL™ TPnB has a high organic solubility, low water solubility, and a high boiling point.

- Applications
- Excellent solvent for heavy duty cleaners.
 - Possible additive for floor wax strippers.
 - Plasticizer in selected resin systems.
 - Coalescent for water-borne architectural and industrial coatings.
 - Coupling agent and grease penetrant in oven cleaners.
 - Solvent for inks in ball point and felt tip pens, stamp pads, and textile printing pastes

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	248.4
Boiling Point @ 760 mmHg, 1.01 ar	275 °C (527 °F)
Flash Point (Setaflash Closed Cup)	126 °C (259 °F)
Freezing Point	<-75 °C (<-103°F)
Vapor pressure@ 20°C — extrapolated	<0.01 mmHg 0.02 Pa
Specific gravity (25/25°C)	0.930
Liquid Density @ 20°C	0.930 g/cm3
@ 25°C	0.927 g/cm3
Vapor Density (air = 1)	>6
Viscosity (mm ² /s @ 25°C)	7.0
Surface tension (dynes/cm or mN/m @ 20°C)	29.7
Specific heat (J/g°C @ 25°C)	1.80
Heat of vaporization (J/g) at normal boiling point	2220
Net heat of combustion (kJ/g) — predicted @ 25°C	30.4
Autoignition temperature	202°C (396 °F)
Evaporation rate (n-butyl acetate = 1.0)	<0.01
Solubility, g/L or % @ 25°C	
Solvent in water	40.2 g/L

Hansen solubility parameters	
(J/cm ³) ^{1/2}	
Δ _d (Dispersion)	14.8
Δ _p (Polar)	1.7
Δ _h (Hydrogen bonding)	7.9
Partition Coefficient, n-octanol/water (log Pow)	1.9
Flammable limits (vol.% in air)	
Lower	--
Upper	--

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#	55934-93-5
AICS (Australia)	55934-93-5
DSL (Canada)	55934-93-5
IECSC (China)	55934-93-5
ECI (Korea)	55934-93-5/97-3-252
EINECS (EU)	259-910-3
MITI (Japan)	55934-93-5
ENCS/ISHL (Japan)	7-97
NZIoC (New Zealand)	55934-93-5
PICCS (Philippines)	55934-93-5
TSCA (U.S.)	55934-93-5

@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:

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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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Ireland, The Netherlands, Norway, Portugal, Spain,

Sweden, Switzerland, and the United Kingdom

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