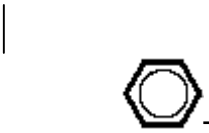
DOWANOL PPH
Propylene Glycol Phenyl Ether



(Major isomer)

A slow-evaporating, very hydrophobic glycol ether ideal in coalescing and carrier solvent applications

Introduction

DOWANOL* PPh glycol ether is a slowevaporating, very hydrophobic glycol ether — more hydrophobic than would be expected based simply on its molecular weight. This product has low odor. With its aromatic structure, DOWANOL PPh glycol ether is an excellent match for phenolic coatings and linings; it is also an excellent coalescent for acrylic-based latexes. DOWANOL PPh glycol ether is also used extensively in dyeing applications, where it can function as both a dye solubilizer and as a dye carrier.

Physical properties†

Molecular weight (g/mol)		152.2
Boiling point @ 760 mmHg, 1.01 bar	469°F	243°C
Flash point (Setaflash Closed Cup)	247°F	120°C
Freezing point	52°F	11°C
Vapor pressure@ 20°C — extrapolated		0.01 mmHg 0.02 mbar
Specific gravity (25/25°C)		1.062
Density @ 20°C @ 25°C	8.87 lb/gal 8.84 lb/gal	1.063 g/cm^3 1.059 g/cm^3
Viscosity (cP or mPa·s @ 25°C)		24.5
Surface tension (dynes/cm or mN/m @ 25°C)		38.1
Specific heat (J/g/°C @ 25°C)		2.18
Heat of vaporization (J/g) at normal boiling point		319
Net heat of combustion (kJ/g) — predicted @ 25°C		30.4
Autoignition temperature	923°F	495°C
Evaporation rate	(n-butyl acetate = 1.0) (diethyl ether = 1.0)	0.002 >1200
Solubility, g/100 g @ 25°C		
Solvent in water		1 (1 wt%)
Water in solvent		6.5 (6 wt%)

Hansen solubility parameters $(J/cm^3)^{1/2}$	
δ_d (Dispersion)	18.7
δ_p (Polar)	5.7
δ_h (Hydrogen bonding)	11.3
Flammable limits (vol.% in air)	
Lower (calculated)	0.8
Upper	--

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

Classification/Registry Numbers††

CAS Number	770-35-4
AICS (Australia)	770-35-4
DSL (Canada)	770-35-4
ECL (Korea)	3-2899
EINECS (EU)	212-222-7
MITI (Japan)	7-78
TSCA (U.S.)	770-35-4

†† **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

- Latex coalescent in water-based architectural and industrial coatings.
- Carrier solvent for textile dyes.
- Solvent for inks in ball point and felt tip pens, stamp pads, and textile printing pastes.
- Paint removers.
- Coalescent for latex adhesives.

Features

- Coalescing ability
- Powerful solvency
- High dilution ratio
- Low evaporation rate
- Low viscosity
- Storage stability

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

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