



Technical Data Sheet

Butyl CARBITOL™ Solvent

Synonyms

Diethylene glycol monobutyl ether.

Sustainability Attribute:**Chemical Formula**

$C_4H_9(OCH_2CH_2)_2OH$

**Product Description**

Butyl CARBITOL™ is a slow-evaporating, hydrophilic glycol ether with excellent coalescing and coupling power. Butyl CARBITOL™ glycol ether can be considered a slower-evaporating analog of Butyl CELLOSOLVE™ glycol ether. It can be used in combination with Butyl CELLOSOLVE™ glycol ether to lower the evaporation rate and increase the hydrophobicity of the solvent package. In addition, Butyl CARBITOL™ glycol ether offers 100% water solubility.

Uses / Applications

- Latex coalescent in water-based architectural and industrial coatings.
- Coupling agent and solvent in household and industrial cleaners, rust removers, hard surface cleaners, and disinfectants.
- Primary solvent in solvent-based silk screen printing inks.
- Coupling solvent for resins and dyes in water-based printing inks.
- Solvent for ball point and felt tip pen inks, and textile dyeing and printing.
- Coalescent for latex adhesives.
- Deactivator, stabilizer for agricultural pesticides.

Typical Physical Properties

Property	Unit	Value
Molecular weight	g/mol	162.2
Boiling point @ 760 mmHg, 1.01 ar	°C (°F)	230 (446)
Flash point (Setaflash Closed Cup)	°C (°F)	114 (237)
Flash point (open cup)	°C (°F)	93 (199)
Freezing point	°C (°F)	-68 (-90)
Vapor pressure@ 25°C — extrapolated	mmHg	0.03
	Pa	2.9
Specific gravity (25/25°C)		0.951

Typical Physical Properties:

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

Typical Physical Properties (Cont.)

Property	Unit	Value
Liquid density @ 20°C	g/cm ³	0.955
@ 25°C	g/cm ³	0.948
Vapor density (air = 1)		No test data available
Viscosity (@ 25°C)	cP or mPa•s	6.0
Surface tension (@ 20°C)	dynes/cm or mN/m	30.0 (undiluted)
Specific heat (@ 25°C)	J/g°C	2.26
Heat of vaporization at normal boiling point	J/g	276
Net heat of combustion — predicted @ 25°C	kJ/g	28.7
Autoignition temperature	°C (°F)	210 (410)
Evaporation rate (n-butyl acetate = 1.0)		< 0.01
Solubility, @ 25°C	g/100 g	
Solvent in water		955
Hansen solubility parameters (J/cm ³) ^{1/2}		
_d (Dispersion)		16.0
_p (Polar)		7.0
_h (Hydrogen bonding)		10.6
Partition coefficient, n-octanol/water (log Pow)		1.0
Flammable limits	vol.% in air	
Lower		0.85
Upper		24.60

Classification/ Registry Numbers/Country Inventory¹.

CAS#	112-34-5
AICS (Australia)	112-34-5
DSL (Canada)	112-34-5
IECSC (China)	112-34-5
ECI (Korea)	112-34-5
EINECS (EU)	203-961-6
MITI (Japan)	112-34-5
ENCS/IHSL (Japan)	2-422
NZIoC (New Zealand)	112-34-5
PICCS (Philippines)	112-34-5
TSCA (U.S.)	112-34-5

¹NOTE: 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

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