Technical Data Sheet



Product Name

Butyl CARBITOL™ Solvent

Synonyms

Diethylene glycol monobutyl ether.

Chemical Formula

C₄H₉(OCH₂CH₂)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.

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	Value
Molecular Weight (g/mol)	162.2
Boiling Point @ 760 mmHg, 1.01 ar	230 °C (446 °F)
Flash Point (Setaflash Closed Cup)	114 °C (237 °F)
Flash Point (Open Cup)	93 °C (199 °F)
Freezing Point	-68 °C (-90°F)
Vapor pressure@ 25°C — extrapolated	0.03 mmHg
	2.9 Pa
Specific gravity (25/25°C)	0.951
Liquid Density @ 20°C	0.955 g/cm3
@ 25°C	0.948 g/cm3
Vapor Density (air = 1)	No Test Data Available
Viscosity (cP or mPa•s @ 25°C)	6.0
Surface tension (dynes/cm or mN/m @ 20°C)	30.0 (undiluted)
Specific heat (J/g/°C @ 25°C)	2.26
Heat of vaporization (J/g) at normal boiling	276
point	
Net heat of combustion (kJ/g) — predicted @	28.7
25°C	
Autoignition temperature	210 °C (410 °F)
Evaporation rate (n-butyl acetate = 1.0)	<0.01
Solubility, g/100 g @ 25°C	
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-octonol/water	1.0	
(log Pow)		
Flammable limits (vol.% in air)		_
Lower	0.85	
Upper	24.60	

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#	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

@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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