Technical Data Sheet



Product Name

UCAR™ Filmer IBT

Synonyms

2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate; Isobutyric acid, ester with 2,2,4-trimethyl-1,3-pentanediol

Chemical Formula

(CH₃)₂CHCH(OH)C(CH₃)₂CH₂OC(O)CH(CH₃)₂

Product Description

UCAR™ Filmer IBT is an effective coalescent solvent for latex architectural trade paints, inks and industrial coatings. It may be readily added to formulations without the negative impacts associated with some filmers, such as viscosity increases, gel formation or coagulation.

Features

- · Non-HAP (Hazardous Air Pollutant) Solvent
- Slow evaporation rate
- Very low water solubility
- High scrub resistance
- Excellent coalescing aid for emulsion polymers
- Excellent hydrolytic stability
- No adverse impact on gloss
- No impact on efficiency of synthetic thickeners
- · No problems with coagulation or gel formation
- No problems with viscosity increases

Applications

- Coalescing aid
- Coatings
- Nail care
- Printing inks
- Solvents for cosmetics and personal care
- Plasticizers
- Chemical intermediate

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	216
Boiling Point @ 760 mmHg, 1.01 ar	255 °C (491 °F)
Flash Point (Setaflash Closed Cup)	119 °C (246°F)
Freezing Point	<-70 °C (<-94°F)
Vapor pressure@ 25°C — extrapolated	<0.01 mmHg
	<0.001 kPa
Specific gravity (20/20°C)	0.948
Liquid Density @ 20°C	0.948 g/cm3
Vapor Density (air = 1)	7

Form No. 327-00010-0812

Viscosity (cP or mPa•s @ 25°C)	12.9
Surface tension (dynes/cm or mN/m @ 25°C)	30.7
Specific heat (J/g/°C @ 25°C)	No test data available
Heat of vaporization (J/g) at normal boiling	No test data available
point	
Net heat of combustion (kJ/g) — predicted	No test data available
@ 25°C	
Autoignition temperature	388 °C (730 °F)
Evaporation rate (n-butyl acetate = 1.0)	0.01
Solubility, g/L or % @ 20°C	
Solvent in water	0.12%
Water in solvent	2.9%
Hansen solubility parameters	
(J/cm ³)1/2	
_Total	9.3
_Non-Polar	7.4
_Polar	3.0
_Hydrogen bonding	4.8
Partition Coefficient, n-octonol/water	3.2
(log Pow)	
Flammable limits (vol.% in air)	
Lower	0.6
Upper	4.2

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#	25265-77-4
AICS (Australia)	25265-77-4
DSL (Canada)	25265-77-4
IECSC (China)	25265-77-4
ECI (Korea)	25265-77-4/KE-24891
EINECS (EU)	246-771-9
MITI/ (Japan)	25265-77-4
ENCS/IHSL (Japan)	2-778
NZIoC (New Zealand)	25265-77-4
PICCS (Philippines)	25265-77-4
TSCA (U.S.)	25265-77-4

@NOTE: Classifications apply only to this Oxygenated Solvents 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	Drum	Not Applicable
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 www.dow.com

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