Technical Data Sheet

Product Name

UCAR™ Ester EEP

Synonyms

Ethyl 3–Ethoxypropionate; 3-Ethoxypropionic acid ethyl ester

Chemical Formula

$C_2H_5OCH_2CH_2CO_2C_2H_5$

Product Description

UCAR™ Ester EEP is a slow evaporating ether–ester solvent with excellent solvent properties for a wide range of coating applications. It provides excellent film formation due to its enhanced flow and leveling characteristics.

Features

- Moderate odor
- High boiling point
- Low surface tension
- High electrical resistance
- Slow evaporation rate
- High solvency for a wide range of polymers
- Excellent retarder characteristics
- Ether–Ester functionality
- Excellent solvent release from coating films
- Low solution viscosity
- Excellent flow & leveling
- Non-HAP (Hazardous Air Pollutant) Solvent

Applications

- High solids coatings
- Electrostatically sprayed coatings
- Conventional enamels and lacquers
- Acrylic polymerization

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	146.19
Boiling Point @ 760 mmHg, 1.01 ar	165 °C (329 °F)
Flash Point (Setaflash Closed Cup)	58 °C (136.4°F)
Freezing Point	-50 °C (-58°F)
Vapor pressure@ 25°C — extrapolated	0.7 mmHg 0.23 kPa
Specific gravity (20/20°C)	0.951
Liquid Density @ 20°C	0.949 g/cm3
Vapor Density (air = 1)	5
Viscosity (cP or mPa•s @ 20°C)	1.3
Surface tension (dynes/cm or mN/m @ 25°C)	28.1
Specific heat (J/g/°C @ 25°C)	No test data available

Heat of vaporization (J/g) at normal boiling point	No test data available
Net heat of combustion (kJ/g) — predicted @ 25°C	No test data available
Autoignition temperature	377 °C (711 °F)
Evaporation rate (n-butyl acetate = 1.0)	0.1
Solubility, g/L or % @ 20°C	
Solvent in water	54.1
Water in solvent	--
Hansen solubility parameters $(J/cm^3)^{1/2}$	
_Total	9.1
_Non-Polar	7.9
_Polar	1.6
_Hydrogen bonding	4.3
Partition Coefficient, n-octonol/water (log Pow)	1.35
Flammable limits (vol.% in air)	
Lower	1.05
Upper	No Test data available

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#	763-69-9
AICS (Australia)	763-69-9
DSL (Canada)	763-69-9
IECSC (China)	763-69-9
ECI (Korea)	763-69-9/KE-13479
EINECS (EU)	212-112-9
MITI/ ENCS/IHSL (Japan)	763-69-9
NZIoC (New Zealand)	763-69-9
PICCS (Philippines)	763-69-9
TSCA (U.S.)	763-69-9

@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
North America	Bulk/Drum	Tank Truck/Tank Car
Pacific	Bulk/Drum	Tank Truck

Dow encourages its customers and potential users to review their applications from the standpoint of human health and environmental aspects. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature,

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including Material Safety Data Sheets, should be consulted prior to the use.

Product Stewardship

Dow encourages its customers and potential users to review their applications from the standpoint of human health and environmental aspects. To help ensure that Dow products are not used in ways for which they are not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature, including Material Safety Data Sheets, should be consulted prior to the use.

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

* International toll free from Austria, Belgium, Denmark, Finland (prefix 990),France, Germany, Hungary, Ireland, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom

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