



Product Name	Propionic Acid
Synonyms	Methyl acetic acid; ethyl formic acid; propanoic acid
Chemical Formula	$\text{CH}_3\text{CH}_2\text{COOH}$
Product Description	Propionic acid is a colorless pungent smelling liquid, miscible with water and almost all normal organic solvents. Produced under Good Manufacturing Practices (GMPs).
Applications	<ul style="list-style-type: none"> • Preservative (in calcium and sodium propionate) – EPA FIFRA registered grades. • Anti-mold agent (ammonium propionate) • Food preservative (calcium and sodium propionate) • Flavoring agent • Herbicide intermediate • Dye intermediates • Textile and rubber auxiliaries • Plastics • Plasticizers • Cosmetics

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	74.08
Boiling Point @ 760 mmHg, 1.01 ar	104.9 °C (220.8 °F)
Flash Point (Setaflash Closed Cup)	50.5 °C (122.9°F)
Freezing Point	<-20 °C (<-4°F)
Vapor pressure@ 25°C — extrapolated	2.4 mmHg 3.99 hPa
Specific gravity (20/20°C)	0.995
Liquid Density @ 20°C	0.995 g/cm3
Vapor Density (air = 1)	2.6
Viscosity (cP or mPa·s @ 20°C)	1.02
Surface tension (dynes/cm or mN/m @ 25°C)	26.2
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	440 °C (824 °F)
Evaporation rate (n-butyl acetate = 1.0)	0.24
Solubility, g/L or % @ 20°C	
Solvent in water	100%
Water in solvent	100 %
Hansen solubility parameters (J/cm ³) ^{1/2}	
_Total	--
_Non-polar	--
_Polar	--
_Hydrogen bonding	--
Partition Coefficient, n-octanol/water (log Pow)	0.33
Flammable limits (vol.% in air)	
Lower	2.9

Upper	12.1
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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#	79-09-4
AICS (Australia)	79-09-4
DSL (Canada)	79-09-4
IECSC (China)	79-09-4
ECI (Korea)	79-09-4/KE-29352
EINECS (EU)	201-176-3
MITI (Japan)	79-09-4
ENCS/ISHL (Japan)	2-602
NZIoC (New Zealand)	79-09-4
PICCS (Philippines)	79-09-4
TSCA (U.S.)	79-09-4

@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.

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

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.

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