

Technical Data Sheet



Product Name **Isobutanol**

Synonyms Isobutyl alcohol; 2-methyl-1-propanol; 2-Methylpropan-1-ol.

Chemical Formula **C₄H₁₀O**

Product Description Isobutanol is a low boiling alcohol and is clear and colorless with a sweet musty odor.

Applications

- Solvent (coatings/cleaners)
- Textiles
- De-icing fluids
- Intermediate for glycol ethers and esters
- Flotation agents
- Floor polishes
- Extractant in production of drugs and antibiotics, hormones, vitamins
- Additive in gasoline
- Anti-corrosion and anti-wear inhibitors in engine oils
- Agricultural chemicals intermediate

Typical Physical Properties

Property	Value
Molecular Weight (g/mol)	74.12
Boiling Point @ 760 mmHg, 1.01 ar	108 °C (226 °F)
Flash Point (Setaflash Closed Cup)	31 °C (88°F)
Freezing Point	<-90 °C (<-130°F)
Vapor pressure@ 20°C — extrapolated	7.2 mmHg <16 hPa
Specific gravity (20/20°C)	0.802
Liquid Density @ 20°C	0.80 g/cm ³
Vapor Density (air = 1)	2.55
Viscosity (cP or mPa·s @ 20°C)	3.102
Surface tension (dynes/cm or mN/m @ 20°C)	23
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	400 °C (752 °F)
Evaporation rate (n-butyl acetate = 1.0)	0.74
Solubility, g/L or % @ 20°C	
Solvent in water	10%
Water in solvent	15%
Hansen solubility parameters (J/cm ³) ^{1/2}	
_Total	11.1
_Non-Polar	7.4
_Polar	2.8

Hydrogen bonding	7.8
Partition Coefficient, n-octanol/water (log Pow)	1
Flammable limits (vol.% in air)	
Lower	1.7
Upper	10.6

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#	78-83-1
AICS (Australia)	78-83-1
DSL (Canada)	78-83-1
IECSC (China)	78-83-1
ECL (Korea)	78-83-1/KE-24894
EINECS (EU)	201-148-0
MITI (Japan)	78-83-1
ENCS/IHSL (Japan)	2-3049
NZIoC (New Zealand)	78-83-1
PICCS (Philippines)	78-83-1
TSCA (U.S.)	78-83-1

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

Product Stewardship

For More Information

North America:

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Europe:

Toll-free (+800) 3-694-6367*

(+31) 11567-2626

Asia-Pacific:

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(+60) 3-7958-3392

Latin America:

(+55) 11-5188-9222

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