

# ISO-BUTANOL

2 METHYL PROPANOL

Last revision 2008

**Chemical Name:** Molecular formula: C<sub>4</sub>H<sub>10</sub>O  
 CAS No.: 78-83-1  
 Abbreviation: IB

## General Description:

Isobutanol is a colorless, volatile, flammable liquid with a characteristic odor. The product is miscible with all common solvents (alcohols, ketones, aldehydes, ethers, glycols and aromatic and aliphatic hydrocarbons), but is sparingly soluble in water. Less dense than water. Vapors heavier than air.

With air, isobutanol gives explosive mixtures within 1.45-11.25% vol. limits.

## Technical Quality Conditions:

Characteristics	MU	Values	Test methods
Iso-butanol, min.	%	99.5	ILL-033/1-01-68
Distillation range (95% vol.)	°C	106-109	ASTM D 1078
Acidity (CH <sub>3</sub> COOH), max.	%	0.006	ASTM D 1613
Water (Karl-Fischer), max.	%	0.1	ASTM E 203
Color, max.	Hazen units	10	SR ISO 2211
Non-volatile, max.	%	0.0025	STAS 8834

## Specific Properties:

Density at 20 °C, g/cm <sup>3</sup>	0.801
Boiling temperature, °C	106-108
Ignition temperature, °C	28 (closed cup)
Flammability	flammable

*The specific properties present approximate values and contain general information, without being part of the technical quality conditions.*

## Main Applications:

- solvent in the industry of nitro-cellulose and alkyd resins based varnishes;
- solvent in synthetic leather manufacturing;
- extraction agent for oils, drugs, perfumes, hormones, antibiotics, vitamins;
- in preparing flotation agents for ore;
- solvent for oven dried, urea and phenolic resin based varnishes;
- additive in deicing fluids;
- feedstock in the production of glycol ethers (in reactions with ethylene or propylene oxide).



## Shipping Information:

- 20 or 40 tons stainless steel tanks.

## Storage:

Store in cold, well ventilated areas, away from oxidizers and flammable sources. Flooring should be waterproof and inflammable, provided with water retaining and separating pails to avoid liquid spread in case of accidental leakage. In case of reservoirs storage, a nitrogen blanket and vents with flame traps are recommended.

Isobutanol can corrode aluminum at temperatures above 60°C. Consequently, it should never be stored, except at low temperatures, in tanks constructed from aluminum and its alloys.

## Safety Considerations:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations

## Warning:

Isobutanol is considered to be a toxic product.

Isobutanol is incompatible with alkali metals, aluminum, strong oxidizers, acetaldehydes, isocyanates, chlorine.

Iso-butanol vapors produce eyes and skin irritation, dizziness and headaches.

## Attention:

Information contained in this document is provided to the best of our knowledge and experience. Please contact OLTCHIM to see if the document has been revised.

## Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of non-compliance with the information provided herein.