



Normal Butanol

Technical Data Sheet

Formula $C_4H_{10}O$
Molecular Weight 74.1
CAS Registry Numbers 71-36-3

<i>Product Specifications</i>	Value	Test Method
Purity, wt. %, min.	99.5	GC
Acidity as acetic acid, wt. %, max.	0.01	IS 323 - 1959
Water, wt. %, max.	0.1	IS 2362 -1963
Color, APHA, max.	10	IS 4161 -1967

Description

Normal Butanol is a clear, mobile, neutral liquid with a characteristic odor. It is miscible with all common solvents but is only sparingly soluble in water.

Typical and Physical Properties

Distillation range, °C, 1 atm	117 – 118
Specific gravity @ 20/20 °C	0.810 – 0.813
Non-volatiles, wt. %, max.	0.005
Appearance	Clear & Colourless

Packaging

Available in bulk & barrels.

Safety

Normal Butanol may irritate the skin and eyes. Inhalation of vapors or mists may irritate the respiratory tract and may cause a narcotic effect.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on safety.

Storage and Handling

Normal Butanol can be stored in tanks of normal carbon steel. In this case, however, steps must be taken to exclude moisture from the atmosphere to avoid impairment or product quality (increase moisture content and discoloration by rust). Stainless steel is recommended for more severe storage conditions. Moisture in the atmosphere must be excluded by storing the product under a blanket of inert gas like Nitrogen.

Normal Butanol can corrode Aluminum above 60 °C; therefore, it is only possible to use tanks made of aluminum or its alloys at lower temperatures. Drums containing the product should be kept tightly closed in a well-ventilated place.

Always refer to the Material Safety Data Sheet (MSDS) for detailed information on handling and disposal.



Applications

Normal Butanol is an excellent solvent for acid-curable lacquers and baking finishes derived from urea, melamine, or phenolic resins.

A large part of Normal Butanol produced is converted into derivatives (primarily esters) for use as solvents in coating industries.

The applications in which Normal Butanol can be used are as follows:

- Solvent for printing inks
- Extractant in the production of drugs and natural substances
- Additive in polishes and cleaners
- Solubilizer in the textile industry (additive in spinning baths or carrier for coloring plastics)
- Additive in deicing fluids
- Anti-icing additive in gasoline
- Humectant for cellulose nitrate

- Feedstock in the production of glycol ethers
- Feedstock in the production of flotation aids (Butyl Xanthate)
- Starting material for the production of Butyl mono Carboxylates, Butyl Acetate, Butyl butyrate.

IMPORTANT:

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use.

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