TECHNICAL DATA SHEET

N-Butyl Alcohol

Revised: 07/22/2026

PRODUCT IDENTIFICATION

Product Name: N-Butyl Alcohol
CAS Number: 71-36-3
Molecular Formula: $C_4H_{10}O$
Molecular Weight: 74.12 g/mol
Grade: Technical Grade
Purity / Concentration: Not Available
Synonyms: Butanol, 1-Butanol

PRODUCT OVERVIEW

N-Butyl Alcohol (1-Butanol) is a high-purity Technical Grade solvent featuring a 99.8% assay and a low color profile of 8 APHA. This colorless, volatile liquid is essential for industrial applications requiring consistent performance, particularly in the formulation of high-quality paints, coatings, and chemical intermediates.

Grade Significance: Technical Grade indicates that this product is manufactured to meet consistent industrial standards, providing a reliable balance of purity and cost-effectiveness for large-scale manufacturing processes.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	100.1	99.5	100.5	GC
Specific Gravity (20°C)	g/mL	0.7862	0.785	0.787	Hydrometer @ 25°C
Water Karl Fischer	%	0.03	0	0.05	Karl Fischer

Values based on 2 batches tested. ND = Not Detected.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless, volatile liquid with a characteristic odor	**Odor**	Mild, alcoholic odor
Form	Liquid	**Boiling Point**	243.9 °F at 760 mmHg (USCG, 1999)
Melting / Freezing Point	-129 °F (USCG, 1999)	**Flash Point**	84 °F (USCG, 1999)
Specific Gravity	0.81	**Solubility**	Miscible with water, alcohols, and many organic solvents
Molecular Formula	$C_4H_{10}O$	**Molecular Weight**	74.12 g/mol
Vapor Pressure (20°C)	5.2 mmHg	**Viscosity (25°C)**	0.54 cP
Refractive Index (20°C)	1.398	**Density (25°C)**	0.810 g/mL
Decomposition Temp.	Not readily decomposed under normal conditions		

APPLICATIONS

1. **Paints and Coatings** — Functions as a versatile solvent that improves flow and leveling properties in various paint and lacquer formulations.
2. **Chemical Manufacturing** — Serves as a critical intermediate in the synthesis of butyl acetate and various esters used in downstream chemical production.
3. **Industrial Cleaning** — Utilized in specialty cleaning formulations due to its effective solvency power in removing oils, resins, and greases.
4. **Analytical Chemistry** — Commonly employed as a mobile phase component in high-performance liquid chromatography (HPLC) procedures.

STORAGE & HANDLING

Proper storage is essential because N-Butyl Alcohol is a flammable liquid with a flash point of 35°C, requiring a cool, well-ventilated area away from ignition sources. Maintaining these conditions prevents the buildup of flammable vapors and ensures the chemical remains stable for industrial use.

- Store in a cool, well-ventilated area away from heat sources.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and acids.
- Use appropriate personal protective equipment (PPE) such as gloves and goggles.
- Ensure proper ventilation when handling to minimize inhalation exposure.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Danger

Hazard Statements:

- H226: Flammable liquid and vapor [Warning Flammable liquids]
- H302: Harmful if swallowed [Warning Acute toxicity, oral]
- H315: Causes skin irritation [Warning Skin corrosion/irritation]
- H318: Causes serious eye damage [Danger Serious eye damage/eye irritation]
- H335: May cause respiratory irritation [Warning Specific target organ toxicity, single exposure; Respiratory tract irritation]
- H336: May cause drowsiness or dizziness [Warning Specific target organ toxicity, single exposure; Narcotic effects]

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com