

### PRODUCT IDENTIFICATION



**Product Name:** N-Butyl Alcohol  
**CAS Number:** 71-36-3  
**Molecular Formula:** C<sub>4</sub>H<sub>10</sub>O  
**Molecular Weight:** 74.12 g/mol  
**Grade:** Technical Grade  
**Purity / Concentration:** Not Available  
**Synonyms:** Butanol, 1-Butanol

### PRODUCT OVERVIEW

N-Butyl Alcohol, Technical Grade, from Alliance Chemical is a versatile solvent and chemical intermediate. This colorless, volatile liquid has a specific gravity of 0.8333 g/mL (as per recent COA data) and is primarily used as a solvent in paints and coatings. Its characteristic odor and solvent properties make it suitable for a variety of industrial applications.

**Grade Significance:** Technical Grade N-Butyl Alcohol is suitable for industrial applications where high purity is not a strict requirement. While it meets defined specifications, it may contain trace impurities that do not significantly affect its performance in most applications like solvent use or chemical synthesis.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Permanganate)	%	30.6	29	32	Titration
Specific Gravity (20°C)	g/mL	0.8333	0.78	0.88	Hydrometer @ 25°C
Water Karl Fischer	%	0.02	0	0.05	ASTM E203 / ISO 6296

Values based on 1 batch tested. ND = Not Detected.

### PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Colorless, volatile liquid with a characteristic odor	<b>Odor</b>	Mild, alcoholic odor
<b>Form</b>	Liquid	<b>Boiling Point</b>	117°C (243°F)
<b>Melting / Freezing Point</b>	-89°C (-128°F)	<b>Flash Point</b>	35°C (95°F)
<b>Specific Gravity</b>	0.81	<b>Solubility</b>	Miscible with water, alcohols, and many organic solvents
<b>Molecular Formula</b>	C <sub>4</sub> H <sub>10</sub> O	<b>Molecular Weight</b>	74.12 g/mol
<b>Vapor Pressure (20°C)</b>	5.2 mmHg	<b>Viscosity (25°C)</b>	0.54 cP
<b>Refractive Index (20°C)</b>	1.398	<b>Density (25°C)</b>	0.810 g/mL
<b>Decomposition Temp.</b>	Not readily decomposed under normal conditions		

## APPLICATIONS

- 1. Paints and Coatings** — N-Butyl Alcohol acts as a solvent in paint and coating formulations, enabling the dissolution of various resins and additives. This ensures proper application and film formation, contributing to the desired finish and durability.
- 2. Chemical Synthesis** — As a key intermediate, N-Butyl Alcohol is used in the production of butyl acetate and other esters. These esters find applications in flavors, fragrances, and as solvents themselves, highlighting N-Butyl Alcohol's importance in chemical manufacturing.
- 3. Cleaning Formulations** — N-Butyl Alcohol's solvent properties make it an effective component in various cleaning formulations. It aids in dissolving and removing grease, grime, and other contaminants from surfaces.
- 4. Pharmaceuticals** — N-Butyl Alcohol can be employed as a solvent or reagent in certain pharmaceutical processes. Its ability to extract or dissolve specific compounds makes it valuable in drug development and manufacturing.
- 5. High-Performance Liquid Chromatography (HPLC)** — N-Butyl Alcohol is commonly used as a mobile phase component in HPLC. Its properties help to optimize separation and resolution of compounds during analysis, ensuring accurate and reliable results.
- 6. Adhesives** — N-Butyl Alcohol can be used as a solvent in adhesive formulations. It helps to control the viscosity and drying time of the adhesive, ensuring proper bonding.

## STORAGE & HANDLING

Proper storage of N-Butyl Alcohol is crucial due to its flammability (H226). It should be stored in a cool, dry, and well-ventilated area away from heat, sparks, and open flames to prevent fire hazards. Keeping the container tightly closed also minimizes exposure to air and moisture, preserving the product's purity and preventing degradation.

- 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](http://www.alliancechemical.com)

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