

PRODUCT IDENTIFICATION



Product Name: n-Propyl Alcohol
CAS Number: 71-23-8
Molecular Formula: C₃H₈O
Molecular Weight: 60.10 g/mol
Grade: Technical Grade
Purity / Concentration: 98.8%
Synonyms: 1-Propanol, Propyl Alcohol

PRODUCT OVERVIEW

n-Propyl Alcohol (1-Propanol) is a clear, colorless technical grade solvent known for its high purity and efficient evaporation profile. With a low water content of 0.04% and minimal color at 3 APHA, this versatile chemical is a staple for high-performance cleaning and industrial synthesis applications.

Grade Significance: Technical Grade indicates a high-purity product optimized for industrial and manufacturing processes, ensuring consistent performance and reliability in large-scale formulations.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	100.0	99.5	100.5	GC
Color (APHA)	APHA	3	—	5	APHA
Water Karl Fischer	%	0.04	0	0.1	Karl Fischer
Acidity As Acetic	ppm	9	0	30	Titration
Aldehydes As Acetaldehyde	ppm	1	0	10	Spectrophotometry

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Characteristic alcohol odor
Form	Liquid	Boiling Point	207 °F at 760 mmHg (USCG, 1999)
Melting / Freezing Point	-195.2 °F (USCG, 1999)	Flash Point	77 °F (USCG, 1999)
Specific Gravity	0.803	Solubility	Soluble in water and organic solvents
Molecular Formula	C ₃ H ₈ O	Molecular Weight	60.10 g/mol
Vapor Pressure (20°C)	33 mmHg	Viscosity (25°C)	0.87 cP
Refractive Index (20°C)	1.385	Density (25°C)	0.803 g/mL

APPLICATIONS

1. **Printing and Coatings** — Used as a high-performance solvent and flow agent in flexographic inks and surface coatings to ensure consistent application and rapid drying times.
2. **Chemical Manufacturing** — Serves as a critical feedstock for the production of n-propyl acetate, n-propylamine, and various other essential propyl derivatives.
3. **Industrial Cleaning** — Provides an effective degreasing solution for metal parts and electronic assemblies, particularly when a specific evaporation rate is required for precision cleaning.
4. **Cosmetics and Pharmaceuticals** — Functions as a reliable excipient and solvent in various topical antiseptic and personal care formulations.

STORAGE & HANDLING

Due to its high flammability and classification as a volatile liquid, n-Propyl Alcohol must be stored in a cool, well-ventilated area away from all ignition sources. Proper containment prevents the accumulation of flammable vapors and minimizes the risk of fire or hazardous exposure to personnel.

- Store in a cool, dry, well-ventilated area away from heat, sparks, and open flames.
- Bulk storage in HDPE, stainless steel, or epoxy-lined carbon steel drums and IBC totes. Avoid aluminum and zinc-coated containers.
- Keep containers tightly closed when not in use to prevent vapor release and moisture pickup.
- Segregate from strong oxidizers, strong acids, and reactive metals.
- Ground and bond all transfer equipment; use non-sparking tools and explosion-proof electrical fittings.
- Wear appropriate PPE including chemical-resistant gloves, splash goggles, and flame-resistant clothing during handling.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H225: Highly flammable liquid and vapour
- H318: Causes serious eye damage
- H336: May cause drowsiness or dizziness

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

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.