

PRODUCT IDENTIFICATION



Product Name: Denatured Alcohol 200 Proof 3C Technical Grade

CAS Number: 64-17-5

Molecular Formula: C₂H₆O

Molecular Weight: 46.07 g/mol

Grade: Technical Grade

Purity / Concentration: 100%

Synonyms: Ethanol, Ethyl Alcohol

PRODUCT OVERVIEW

Alliance Chemical's Denatured Alcohol 200 Proof 3C Technical Grade is a high-purity, colorless solvent featuring a 100% assay and low impurity profile, including a color rating of 5 APHA. This versatile liquid is engineered for critical industrial applications, offering exceptional performance in extraction and chemical processing.

Grade Significance: Technical Grade indicates that this product is manufactured for industrial and manufacturing utility where high purity is required, though it is not intended for food, drug, or cosmetic consumption.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	100.0	99.5	100.5	GC
Color (APHA)	APHA	5	—	10	APHA
Specific Gravity (20°C)	g/mL	0.7893	0.7873	0.7913	Hydrometer @ 20°C
Non Volatile Residue	mg/100mL	0.15	0	5	Evaporation
Iron (Fe)	ppm	0.01	0	—	ICP-MS
Acidity As Acetic	ppm	20	0	30	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Characteristic alcoholic odor
Form	Liquid	Boiling Point	173.3 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-173.4 °F (NTP, 1992)	Flash Point	55 °F (NTP, 1992)
Specific Gravity	0.789	Solubility	Soluble in water and most organic solvents
Molecular Formula	C ₂ H ₆ O	Molecular Weight	46.07 g/mol
Vapor Pressure (20°C)	59 mmHg	Viscosity (25°C)	1.2 cP
Refractive Index (20°C)	1.361	Density (25°C)	0.789 g/mL

APPLICATIONS

1. **Pharmaceutical Manufacturing** — Utilized as a high-efficiency solvent for the extraction of active pharmaceutical ingredients from plant materials.
2. **Industrial Cleaning** — Effective for precision cleaning and degreasing of components in demanding manufacturing environments.
3. **Analytical Chemistry** — Serves as a reliable mobile phase component in high-performance liquid chromatography (HPLC) procedures.
4. **Chemical Synthesis** — Acts as a foundational reagent in various laboratory reactions and analytical chemical processes.

STORAGE & HANDLING

Due to its flash point of 55 °F, this chemical is classified as a highly flammable liquid that must be stored in a cool, well-ventilated area away from ignition sources. Proper containment prevents the accumulation of vapors, which mitigates fire hazards and maintains the integrity of the 100% assay concentration.

- Store in a cool, well-ventilated area away from heat sources.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Keep away from strong oxidizers and acids to avoid hazardous reactions.
- Ensure proper PPE is worn, including gloves and goggles, during handling.
- Avoid exposure to direct sunlight to prevent degradation.

AVAILABLE PACKAGING

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

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H225: Highly flammable liquid and vapour
- H319: Causes serious eye irritation

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.

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