

PRODUCT IDENTIFICATION



Product Name: Isopropyl Alcohol 99% - Technical Grade

CAS Number: 67-63-0

Molecular Formula: C₃H₈O

Molecular Weight: 60.10 g/mol

Grade: Technical Grade

Purity / Concentration: 99%

Synonyms: Isopropanol, 2-Propanol

PRODUCT OVERVIEW

Alliance Chemical offers high-purity 99% Isopropyl Alcohol (IPA) in a Technical Grade formulation, characterized by its low moisture content of 0.06% and minimal residue of 4 ppm. This clear, volatile solvent is an essential component for high-performance applications requiring precise chemical consistency and rapid evaporation.

Grade Significance: Technical Grade signifies that this product is manufactured to meet rigorous industrial standards, providing a high-purity chemical solution that is cost-effective for large-scale manufacturing and laboratory use.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc	%	98.9	98.5	99.5	GC
Color (APHA)	APHA	2	0	5	APHA
Specific Gravity (20°C)	g/mL	0.7887	0.785	0.787	Hydrometer @ 25°C
Residue On Evaporation	ppm	4	0	10	Evaporation
Water Karl Fischer	%	0.06	0	0.1	Karl Fischer
Acidity As Acetic	ppm	8	0	20	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, volatile liquid with high transparency	Odor	Characteristic alcohol odor
Form	Liquid	Boiling Point	180.5 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-127.3 °F (NTP, 1992)	Flash Point	53 °F (NTP, 1992)
Solubility	Highly miscible with water, alcohols, many solv...	Molecular Formula	C ₃ H ₈ O
Molecular Weight	60.10 g/mol	Vapor Pressure (20°C)	33.5 mmHg
Viscosity (25°C)	0.88 cP	Refractive Index (20°C)	1.377
Density (25°C)	0.786 g/mL		

APPLICATIONS

1. **Analytical Chemistry** — Serves as a reliable mobile phase component in reversed-phase chromatography to facilitate the effective separation of complex organic compounds.
2. **Pharmaceutical Manufacturing** — Utilized as a high-efficiency solvent for the extraction and purification of active pharmaceutical ingredients.
3. **Industrial Maintenance** — Provides superior cleaning and degreasing capabilities for precision components and manufacturing surfaces.
4. **Cosmetic Formulation** — Acts as a versatile solvent base for a variety of personal care products, ensuring proper consistency and active ingredient distribution.

STORAGE & HANDLING

Due to its high flammability and low flash point of 53 °F, this solvent must be stored in a cool, well-ventilated area away from heat sources and ignition points. Proper containment prevents the buildup of dangerous vapors and maintains the integrity of the product by preventing contamination.

- 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 personal protective equipment (PPE) is worn during handling, including gloves and goggles.

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
- 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.

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