

PRODUCT IDENTIFICATION



Product Name: Isopropyl Acetate 99.98% ACS Grade

CAS Number: 108-21-4

Molecular Formula: C₅H₁₀O₂

Molecular Weight: 102.13 g/mol

Grade: ACS Grade

Purity / Concentration: 99.98%

Synonyms: Isopropyl Ethanoate, Acetic Acid Isopropyl Ester

PRODUCT OVERVIEW

Isopropyl Acetate 99.98% ACS Grade is a high-purity solvent characterized by its exceptional clarity and minimal trace impurities, such as a water content of only 0.015%. This premium-grade chemical is essential for sensitive analytical applications and rigorous industrial processes where consistency is paramount.

Grade Significance: ACS Grade indicates that the product meets the stringent quality standards set by the American Chemical Society, ensuring it is suitable for sensitive laboratory and analytical use where high purity is required.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Purity Gc	%	99.7	99.5	100.5	GC/Titration
Color (APHA)	APHA	2	—	10	APHA
Specific Gravity (20°C)	g/mL	0.8718	0.8698	0.8738	Hydrometer @ 20°C
Residue On Evaporation	ppm	3	—	10	Evaporation
Water Karl Fischer	%	0.015	—	0.05	Karl Fischer
Acidity As Acetic	ppm	15	—	50	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless, volatile liquid	Odor	Fruity odor
Form	Liquid	Boiling Point	190 to 196 °F at 743.3 mmHg (NTP, 1992)
Melting / Freezing Point	-100.1 °F (NTP, 1992)	Flash Point	36 °F (NTP, 1992)
Specific Gravity	0.872	Solubility	Soluble in water, alcohols, ethers, and other organic solvents
Molecular Formula	C ₅ H ₁₀ O ₂	Molecular Weight	102.13 g/mol
Vapor Pressure (20°C)	30 mmHg	Viscosity (25°C)	0.89 cP
Refractive Index (20°C)	1.375	Density (25°C)	0.873 g/mL
Partition Coefficient (log P)	1.18	Decomposition Temp.	Not applicable (thermally labile at extreme conditions)

APPLICATIONS

1. **Analytical Chemistry** — Serves as a high-performance mobile phase component in reversed-phase HPLC, ensuring precise separation of organic compounds.
2. **Pharmaceuticals** — Used as a high-purity solvent in extraction processes to isolate active pharmaceutical ingredients without introducing unwanted contaminants.
3. **Coatings and Adhesives** — Acts as a versatile solvent in the formulation of high-quality paints and coatings, providing excellent solvency and flow properties.
4. **Industrial Cleaning** — Functions as an effective cleaning agent for precision equipment, leaving minimal residue due to its low evaporation residue of 3 ppm.

STORAGE & HANDLING

Due to its highly flammable nature and a flash point of 36°F, this solvent must be stored in a cool, well-ventilated area away from ignition sources. Proper containment is critical to prevent the accumulation of vapors, which can cause drowsiness or dizziness if inhaled.

- Store in a cool, dry, 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.
- Keep away from direct sunlight to prevent degradation.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles when handling.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 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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