

PRODUCT IDENTIFICATION



Product Name: Isopropyl Acetate 99.98%
CAS Number: 108-21-4
Molecular Formula: C₅H₁₀O₂
Molecular Weight: 102.13 g/mol
Grade: Technical
Purity / Concentration: 99.98%
Synonyms: Isopropyl Ethanoate, Propan-2-yl Acetate

PRODUCT OVERVIEW

Isopropyl Acetate 99.98% is a high-purity Technical grade solvent known for its excellent solvency and controlled evaporation rate. Featuring an assay of 99.985% and minimal moisture content of 0.015%, it is a reliable choice for industrial formulations and laboratory applications.

Grade Significance: Technical grade indicates that the product meets high-purity standards suitable for industrial and laboratory use where performance and consistency are critical. It ensures that users receive a standardized chemical profile, minimizing the risk of impurities affecting their end-product quality.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.985	99.98	—	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.871	0.87	0.873	ASTM D4052
Residue After Evaporation	%	0.0005	—	0.0010	Gravimetric
Water Content	%	0.015	—	0.02	ASTM E203
Iron (Fe)	ppm	0.05	—	0.1	ICP-OES
Chloride (Cl ⁻)	ppm	0.1	—	1	Ion Chromatography
Sulfate (SO ₄ ²⁻)	ppm	0.2	—	1	Ion Chromatography
Acidity As Acetic Acid	%	0.0010	—	0.0020	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless, volatile liquid	Odor	Fruity, sweet odor
Form	Liquid	Boiling Point	88°C (190.4°F)
Melting / Freezing Point	-80°C (-112°F)	Flash Point	11°C (51.8°F)
Solubility	Soluble in water, alcohols, ethers, and most 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)	0.45 cP	Refractive Index (20°C)	1.375
Density (25°C)	0.872 g/mL	Decomposition Temp.	Not expected under normal handling

APPLICATIONS

1. **Analytical Chemistry** — Serves as a high-performance mobile phase component in reversed-phase HPLC for the precise separation of complex organic compounds.
2. **Coatings and Adhesives** — Functions as a high-efficiency solvent in paint and adhesive formulations, providing balanced evaporation and superior film-forming properties.
3. **Pharmaceuticals** — Utilized in liquid-liquid extraction processes to effectively isolate and purify pharmaceutical intermediates.
4. **Industrial Cleaning** — Acts as a powerful cleaning agent for removing stubborn residues and contaminants from sensitive industrial surfaces.

STORAGE & HANDLING

Due to its classification as a highly flammable liquid with a flash point of 11°C, this chemical must be stored in a cool, well-ventilated area away from ignition sources. Proper containment prevents the accumulation of vapors, which can cause drowsiness or dizziness, and ensures the product remains stable for industrial use.

- Store in a cool, well-ventilated area away from heat sources and open flames.
- Use materials compatible with isopropyl acetate, such as HDPE or glass containers.
- Avoid contact with strong oxidizing agents and acids.
- Keep container tightly closed when not in use to prevent evaporation.
- Use appropriate personal protective equipment (PPE) 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 vapor [Danger Flammable liquids]
- H319: Causes serious eye irritation [Warning Serious eye damage/eye 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.

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