

PRODUCT IDENTIFICATION



Product Name: Ethyl Acetate ACS
CAS Number: 141-78-6
Molecular Formula: C₄H₈O₂
Molecular Weight: 88.11 g/mol
Grade: ACS Grade
Purity / Concentration: Not Available
Synonyms: Ethyl Ethanoate, Acetic Ether

PRODUCT OVERVIEW

Ethyl Acetate ACS is a high-purity, colorless solvent characterized by a 99.9% purity level and exceptionally low moisture content of 0.0030%. This ACS grade reagent is essential for laboratory applications requiring strict analytical standards and consistent performance.

Grade Significance: ACS Grade indicates that the chemical meets or exceeds the rigorous purity standards set by the American Chemical Society, ensuring reliability for sensitive analytical and research-grade procedures.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Purity Gc	%	99.9	99.5	100.0	GC/Titration
Color (APHA)	APHA	5	—	10	APHA
Specific Gravity (20°C)	g/mL	0.9	0.898	0.902	Hydrometer @ 20°C
Non Volatile Residue	mg/100mL	0.3	0	1	ASTM D1353
Residue On Evaporation	ppm	3	—	10	Evaporation
Water Karl Fischer	%	0.0030	—	0.02	Karl Fischer
Acidity As Acetic	ppm	20	—	50	Titration

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless, volatile liquid with a characteristic ester-like odor	Odor	Sweet, fruity odor
Form	Liquid	Boiling Point	171 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-118.5 °F (NTP, 1992)	Flash Point	24 °F (NTP, 1992)
Specific Gravity	0.902	Solubility	Soluble in water, alcohol, ether, and most organic solvents
Molecular Formula	C ₄ H ₈ O ₂	Molecular Weight	88.11 g/mol
Vapor Pressure (20°C)	97 mmHg	Viscosity (25°C)	0.45 cP
Refractive Index (20°C)	1.372	Density (25°C)	0.897 g/mL

APPLICATIONS

1. **Analytical Chemistry** — Serves as a high-performance mobile phase component in chromatography for the precise separation of complex organic compounds.
2. **Pharmaceutical Manufacturing** — Utilized in the extraction and purification of active pharmaceutical ingredients where solvent purity is critical to final product quality.
3. **Coatings and Adhesives** — Functions as a high-efficiency solvent that provides optimal evaporation rates for paints, industrial coatings, and various adhesive formulations.
4. **Industrial Cleaning** — Acts as a powerful cleaning agent for removing stubborn residues and contaminants from sensitive manufacturing equipment.

STORAGE & HANDLING

Due to its high flammability and low flash point of 24 °F, Ethyl Acetate must be stored in a cool, well-ventilated area away from all ignition sources. Proper containment is necessary to prevent the buildup of vapors, which can cause drowsiness or dizziness if inhaled.

- Store in a cool, well-ventilated area away from heat sources and open flames.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and strong acids.
- Keep container tightly closed when not in use to minimize evaporation.
- Use 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
- EUH066: Repeated exposure may cause skin dryness or cracking

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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