

PRODUCT IDENTIFICATION



Product Name: Ethyl Acetate ACS
CAS Number: 141-78-6
Molecular Formula: $C_4H_8O_2$
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, volatile solvent essential for precise laboratory and industrial processes. Featuring a purity of 99.9% and extremely low water content at 0.0030%, this reagent ensures consistent results in analytical and manufacturing applications.

Grade Significance: ACS Grade indicates that the product meets the stringent purity standards set by the American Chemical Society, ensuring it is suitable for demanding laboratory and analytical use. This grade provides the reliability needed for reproducible results where reagent-grade purity is non-negotiable.

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	$C_4H_8O_2$	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 critical mobile phase component in high-performance liquid chromatography (HPLC) for the accurate separation of organic compounds.
2. **Pharmaceutical Manufacturing** — Utilized in the extraction and purification of active pharmaceutical ingredients where high solvent purity is required to prevent contamination.
3. **Coatings and Adhesives** — Functions as a highly effective solvent in the formulation of paints and coatings, valued for its optimized evaporation rate.
4. **Industrial Cleaning** — Used as a precision cleaning agent to remove stubborn residues and contaminants from sensitive manufacturing equipment and surfaces.

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 heat, sparks, and open flames. Proper containment is essential to prevent the accumulation 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.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.