

### PRODUCT IDENTIFICATION



**Product Name:** Amyl Acetate ACS Grade

**CAS Number:** 628-63-7

**Molecular Formula:** C<sub>7</sub>H<sub>14</sub>O<sub>2</sub>

**Molecular Weight:** 130.18 g/mol

**Grade:** ACS Grade

**Purity / Concentration:** Not Available

**Synonyms:** Pentyl Acetate, Amyl Ethanoate

### PRODUCT OVERVIEW

Alliance Chemical's Amyl Acetate ACS Grade is a high-purity solvent, boasting an assay of 99.1%. This clear, colorless liquid is commonly used as a mobile phase in chromatography and as a solvent in paints and coatings. Its controlled acidity (0.0010 % as acetic acid) ensures minimal interference in sensitive applications.

**Grade Significance:** ACS Grade Amyl Acetate meets the stringent purity standards set by the American Chemical Society, ensuring its suitability for demanding laboratory applications. This high level of purity minimizes the presence of impurities that could interfere with experiments or analyses.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.1	98	—	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.874	0.873	0.876	USP <841>
Residue After Ignition	%	0.0005	—	0.0010	Gravimetric
Water Content	%	0.02	—	0.1	Karl Fischer Titration
Heavy Metals (as Pb)	ppm	0.05	—	1	ICP-OES
Iron (Fe)	ppm	0.02	—	0.5	ICP-OES
Chloride (Cl <sup>-</sup> )	ppm	0.1	—	5	Ion Chromatography
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	ppm	0.2	—	5	Ion Chromatography
Substances Darkened By Sulfuric Acid	—	Passes Test	—	—	Visual
Acidity As Acetic Acid	%	0.0010	—	0.01	Titration

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

## PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid, volatile, slight fruity...	<b>Odor</b>	Fruity, banana-like odor
<b>Form</b>	Liquid	<b>Boiling Point</b>	142°C (288°F)
<b>Melting / Freezing Point</b>	-79°C (-110°F)	<b>Flash Point</b>	24°C (75°F)
<b>Solubility</b>	Organic solvent soluble, minimal water miscibility	<b>Molecular Formula</b>	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>
<b>Molecular Weight</b>	130.18 g/mol	<b>Vapor Pressure (20°C)</b>	5.5 mmHg
<b>Viscosity (25°C)</b>	0.9 cP	<b>Refractive Index (20°C)</b>	1.396
<b>Density (25°C)</b>	0.874 g/mL	<b>Partition Coefficient (log<sub>3.1</sub>P)</b>	
<b>Decomposition Temp.</b>	Not readily decomposed; exothermic decomposition above 200°C		

## APPLICATIONS

- Chromatography** — Amyl Acetate is frequently used as a mobile phase component in reversed-phase chromatography. Its properties allow for effective separation of organic compounds, contributing to accurate analysis and purification processes.
- Paints and Coatings** — Due to its excellent solvency properties, Amyl Acetate serves as a solvent in the formulation of paints and coatings. It helps to dissolve and evenly distribute pigments and resins, resulting in smooth and durable finishes.
- Food and Beverage** — Amyl Acetate is employed as a flavoring agent in food products, providing a characteristic fruity aroma. Its controlled purity ensures that it imparts the desired flavor profile without introducing unwanted contaminants.
- Pharmaceuticals** — In the pharmaceutical industry, Amyl Acetate is used in the extraction of active pharmaceutical ingredients from plant materials. Its solvency helps to isolate and concentrate the desired compounds for further processing and formulation.
- Laboratory Analysis** — Amyl Acetate is used as a general-purpose laboratory solvent. Its properties make it suitable for various analytical techniques and chemical reactions, supporting research and development efforts.
- Fragrance** — Amyl Acetate is used as a fragrance component. Its fruity ester scent makes it a popular choice for perfumes and other fragrance products.

## STORAGE & HANDLING

Amyl Acetate is a flammable liquid, so proper storage is crucial to prevent fire hazards. Keep it in a tightly closed container in a cool, dry, and well-ventilated area, away from heat, sparks, open flames, and oxidizing agents. This minimizes the risk of ignition and maintains product quality.

- Store in a cool, dry place away from heat and open flames.
- Use materials compatible with amyl acetate, such as HDPE or glass containers.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper ventilation in storage areas to minimize vapor accumulation.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles when handling.

## AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

## SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Warning**



**Hazard Statements:**

- H226: Flammable liquid and vapor [Warning Flammable liquids]

**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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**Alliance Chemical** | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)

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