

PRODUCT IDENTIFICATION

**Product Name:** Amyl Acetate**CAS Number:** 123-92-2**Molecular Formula:** $C_7H_{14}O_2$ **Molecular Weight:** 130.18 g/mol**Grade:** Technical**Purity / Concentration:** 100%**Synonyms:** Pentyl Acetate, Amyl Ethanoate

PRODUCT OVERVIEW

Amyl acetate is an organic compound with the formula $C_5H_{11}O_2$. It is a colorless liquid with a fruity odor, commonly used as a solvent in various applications due to its favorable properties, including low toxicity and good solvency for many organic compounds.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.6	99	100.5	Titration with standardized NaOH
Color (APHA)	APHA	2	—	5	APHA/Hazen visual comparison
Specific Gravity (20°C)	g/mL	0.874	0.871	0.877	Hydrometer or pycnometer at 20°C
Residue After Ignition	%	0.05	—	0.1	Gravimetric residue after evaporation/ignition
Water Content	%	0.1	—	0.5	Karl Fischer titration
Aluminum (Al)	ppm	0.2	—	1	ICP-OES
Arsenic (As)	ppm	0.0050	—	0.01	ICP-MS
Calcium (Ca)	ppm	0.5	—	2	ICP-OES
Chromium (Cr)	ppm	0.1	—	0.5	ICP-OES
Cobalt (Co)	ppm	0.1	—	0.5	ICP-OES
Copper (Cu)	ppm	0.05	—	0.2	ICP-OES
Heavy Metals (as Pb)	ppm	0.1	—	0.5	ICP-MS
Iron (Fe)	ppm	0.05	—	0.2	ICP-OES or ICP-MS
Lead (Pb)	ppm	0.1	—	0.5	ICP-MS
Magnesium (Mg)	ppm	1	—	5	ICP-OES
Manganese (Mn)	ppm	0.1	—	0.5	ICP-OES
Nickel (Ni)	ppm	0.1	—	0.5	ICP-OES
Potassium (K)	ppm	1	—	5	ICP-OES
Sodium (Na)	ppm	1	—	5	ICP-OES
Zinc (Zn)	ppm	0.2	—	1	ICP-OES
Ammonium (NH ₄ ⁺)	ppm	1	—	5	Ion Chromatography (IC)
Chloride (Cl ⁻)	ppm	1	—	2	Ion Chromatography (IC) or ICP-OES after appropriate digestion
Nitrate (NO ₃ ⁻)	ppm	2	—	5	Ion Chromatography (IC)
Phosphate (PO ₄ ³⁻)	ppm	2	—	5	Ion Chromatography (IC)
Sulfate (SO ₄ ²⁻)	ppm	4	—	10	Ion Chromatography (IC)
Substances Darkened by H ₂ SO ₄	—	Passes test	—	—	Colorimetric overlay with sulfuric acid
Substances Reducing KMnO ₄	—	Passes test	—	—	Potassium permanganate time test
Acidity (meq)	meq	0.05	—	0.2	Acidity by titration (standardized NaOH)
Aldehydes	ppm	2	—	10	DNPH colorimetric assay or GC

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid with fruity banana odor	Odor	Fruity, similar to banana
Form	Liquid	Boiling Point	288 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-109.3 °F (NTP, 1992)	Flash Point	77 °F (NTP, 1992)
Solubility	Low water solubility, high organic solvent comp...	Molecular Formula	C ₇ H ₁₄ O ₂
Molecular Weight	130.18 g/mol	Vapor Pressure (20°C)	9.5 mmHg
Viscosity (25°C)	0.89 cP	Refractive Index (20°C)	1.397
Density (25°C)	0.874 g/mL	Decomposition Temp.	Not readily decomp. under 150°C; stable under ambient conditions

APPLICATIONS

1. **Industrial** — Used as a solvent in the formulation of paints, varnishes, and coatings.
2. **Food and Beverage** — Utilized as a flavoring agent in food products due to its fruity aroma.
3. **Pharmaceutical** — Serves as a solvent for extracting active ingredients in pharmaceutical formulations.
4. **Chemical Manufacturing** — Acts as an intermediate in the synthesis of various organic compounds.
5. **Analytical Chemistry** — Commonly used as a mobile phase component in high-performance liquid chromatography.

STORAGE & HANDLING

- Store in a cool, dry place away from heat sources and open flames.
- Use containers made of HDPE or glass to avoid chemical reactions.
- Ensure proper ventilation in storage areas to prevent vapor accumulation.
- Avoid contact with strong oxidizing agents and acids.
- 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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