TECHNICAL DATA SHEET

Amyl Acetate

Revised: 08/10/2026

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 Grade
Purity / Concentration: 100%
Synonyms: Pentyl Acetate, Amyl Ethanoate

PRODUCT OVERVIEW

Amyl Acetate is a clear, high-purity solvent characterized by its distinct banana-like aroma and reliable performance in industrial formulations. With a high assay of 99.6% and low impurity profile, this Technical Grade liquid is an essential component for solvent-based applications and chemical synthesis.

Grade Significance: Technical Grade indicates that this product is manufactured for industrial use, offering a balance of high purity and cost-effectiveness for large-scale applications.

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_2SO_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**	$C_7H_{14}O_2$
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. **Coatings and Paints** — Functions as a high-quality solvent in the formulation of paints, varnishes, and lacquers to ensure smooth application and consistent drying.
2. **Food and Beverage** — Utilized as a flavoring agent due to its characteristic fruity aroma, commonly used to enhance profile in various food products.
3. **Pharmaceuticals** — Acts as an effective solvent for the extraction and purification of active pharmaceutical ingredients during manufacturing processes.
4. **Chemical Synthesis** — Serves as a versatile intermediate in the synthesis of various organic compounds, providing a stable reaction environment.

STORAGE & HANDLING

Proper storage is critical because Amyl Acetate is a flammable liquid with a flash point of 77°F, requiring a cool, well-ventilated area away from ignition sources. Storing the container tightly sealed prevents evaporation and maintains the chemical's purity by protecting it from atmospheric contaminants.

- 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 vapour
- H319: Causes serious eye irritation
- H335: May cause respiratory irritation
- H336: May cause drowsiness or dizziness

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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