

PRODUCT IDENTIFICATION



Product Name: Tert Butyl Acetate (TBA) Technical Grade

CAS Number: 540-88-5

Molecular Formula: C₆H₁₂O₂

Molecular Weight: 116.16 g/mol

Grade: Technical Grade

Purity / Concentration: 100%

Synonyms: Tert-Butyl Acetate, TBA

PRODUCT OVERVIEW

Tert-Butyl Acetate (TBA) is a high-purity, clear liquid solvent widely utilized for its exceptional solvency and low volatility. This technical grade product features a high purity level of 99.75% and minimal water content, making it an ideal component for industrial coatings and adhesive formulations.

Grade Significance: Technical grade indicates a product formulated for industrial utility where high performance and purity are required, ensuring consistency in manufacturing processes without the premium cost of reagent grades.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Purity Gc	%	99.75	99.5	100.0	GC/Titration
Color (APHA)	APHA	3.5	0	10	APHA
Specific Gravity (20°C)	g/mL	0.86 – 0.875 g/mL	—	—	Hydrometer @ 20°C
Non-Volatile Residue	%	≤ 0.002 %	—	—	Residue on Ignition
Water Karl Fischer	%	0.015	—	0.1	Karl Fischer
Acidity As Acetic	%	0.02	0	0.1	Titration per ACS/USP

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, mobile liquid	Odor	Sweet, fruity odor
Form	Liquid	Boiling Point	208 °F at 760 mmHg (USCG, 1999)
Melting / Freezing Point	-5°C	Flash Point	72 °F (NIOSH, 2024)
Specific Gravity	0.862	Solubility	Low water solubility, excellent organic solvent
Molecular Formula	C ₆ H ₁₂ O ₂	Molecular Weight	116.16 g/mol
Vapor Pressure (20°C)	30 mmHg	Viscosity (25°C)	0.56 cP
Refractive Index (20°C)	1.394	Density (25°C)	0.874 g/mL

APPLICATIONS

1. **Paints and Coatings** — Used as a high-performance solvent to improve the application and flow properties of industrial paints and protective coatings.
2. **Adhesives** — Functions as a key solvent in adhesive formulations, helping to ensure consistent bonding performance across various substrates.
3. **Printing Inks** — Utilized in ink production to achieve optimal viscosity levels and consistent drying characteristics for high-speed printing.
4. **Chemical Extraction** — Employed in specialized extraction processes to efficiently isolate specific compounds from complex chemical mixtures.

STORAGE & HANDLING

Due to its classification as a highly flammable liquid with a flash point of 72°F, TBA must be stored in a cool, well-ventilated area away from heat sources and open flames. Proper containment prevents the accumulation of flammable vapors, which is essential for maintaining workplace safety and compliance with fire codes.

- Store in a cool, well-ventilated area away from heat sources.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper personal protective equipment (PPE) is worn, including gloves and goggles.
- Keep away from direct sunlight to prevent degradation.

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

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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