

### PRODUCT IDENTIFICATION



**Product Name:** Tert Butyl Acetate (TBA)

**CAS Number:** 540-88-5

**Molecular Formula:** C<sub>6</sub>H<sub>12</sub>O<sub>2</sub>

**Molecular Weight:** 116.16 g/mol

**Grade:** Technical

**Purity / Concentration:** 100%

**Synonyms:** Tert-Butyl Acetate, TBA

### PRODUCT OVERVIEW

Tert-Butyl Acetate (TBA) is a high-purity, technical-grade solvent characterized by its clear, mobile liquid form and exceptional solvency. With a 99.8% assay and extremely low moisture content of 0.02%, this product offers consistent performance for industrial applications requiring precise chemical stability.

**Grade Significance:** Technical grade indicates that this product is manufactured to meet rigorous industrial standards, providing a reliable and cost-effective solution for large-scale manufacturing and processing applications.

### CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.8	99	—	GC
Color (APHA)	APHA	5	—	10	ASTM D1209
Residue After Evaporation	%	0.0005	—	0.0010	Gravimetric
Water Content	%	0.02	—	0.05	Karl Fischer
Iron (Fe)	ppm	0.05	—	0.2	ICP-OES
Chloride (Cl <sup>-</sup> )	ppm	0.1	—	1	ISE
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	ppm	0.2	—	1	Turbidimetry
Acidity As Acetic Acid	%	0.0010	—	0.0050	Titration

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

### PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, mobile liquid	<b>Odor</b>	Sweet, fruity odor
<b>Form</b>	Liquid	<b>Boiling Point</b>	98°C (208°F)
<b>Melting / Freezing Point</b>	-5°C	<b>Flash Point</b>	11°C (52°F)
<b>Specific Gravity</b>	0.862	<b>Solubility</b>	Low water solubility, excellent organic solvent
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	<b>Molecular Weight</b>	116.16 g/mol
<b>Vapor Pressure (20°C)</b>	30 mmHg	<b>Viscosity (25°C)</b>	0.56 cP
<b>Refractive Index (20°C)</b>	1.394	<b>Density (25°C)</b>	0.874 g/mL

## APPLICATIONS

1. **Paints and Coatings** — TBA acts as a high-performance solvent that helps achieve optimal film formation and leveling in various coating formulations.
2. **Adhesives** — It serves as an effective carrier solvent in adhesive production, ensuring consistent bonding properties and drying times across materials.
3. **Printing Inks** — TBA is utilized to adjust ink viscosity, providing the necessary flow characteristics for high-quality printing applications.
4. **Chemical Processing** — The solvent is frequently employed in extraction processes to isolate specific compounds from complex mixtures with high efficiency.

## STORAGE & HANDLING

Due to its low flash point of 11°C, Tert-Butyl Acetate is classified as a highly flammable liquid that requires storage in a cool, well-ventilated area away from ignition sources. Maintaining proper containment prevents the accumulation of hazardous vapors and ensures the integrity of the chemical by preventing contamination from moisture or air.

- 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 vapor [Danger 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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