

PRODUCT IDENTIFICATION



Product Name: Acetone Technical Grade
CAS Number: 67-64-1
Molecular Formula: C₃H₆O
Molecular Weight: 58.08 g/mol
Grade: Technical Grade
Purity / Concentration: 100%
Synonyms: 2-Propanone, Dimethyl ketone

PRODUCT OVERVIEW

Acetone Technical Grade from Alliance Chemical is a versatile solvent with a purity of 99.3% as per assay. This clear, colorless liquid is primarily used in industrial settings for cleaning, degreasing, and as a solvent in various formulations.

Grade Significance: Technical Grade acetone is suitable for industrial applications where high purity is not critical. While it may contain trace impurities, it still provides effective solvent properties for many applications, offering a cost-effective solution.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	99.3	98.5	—	GC
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.79	0.789	0.792	ASTM D4052
Water Content	%	0.1	—	0.3	ASTM D1364
Acidity As Acetic Acid	%	0.0010	—	0.0050	Titration
Nonvolatile Matter	ppm	5	—	10	Gravimetric

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear colorless liquid	Odor	Sweet, characteristic odor
Form	Liquid	Boiling Point	56°C (133°F)
Melting / Freezing Point	-95°C (-139°F)	Flash Point	-20°C (-4°F)
Specific Gravity	0.791	Solubility	Miscible with water
Molecular Formula	C ₃ H ₆ O	Molecular Weight	58.08 g/mol
Vapor Pressure (20°C)	180 mmHg	Viscosity (25°C)	0.32 cP
Refractive Index (20°C)	1.359	Density (25°C)	0.791 g/mL
Partition Coefficient (log-P)	-0.24	Decomposition Temp.	No specific decomposition below 200°C; starts to decompose at elevated temperatures (approx. >300°C with catalytic conditions); typical reference value ~561°C critical decomposition temperature in air

APPLICATIONS

1. **Pharmaceutical** — Acetone is utilized in liquid-liquid extraction processes to isolate pharmaceutical intermediates. Its solvent properties facilitate the separation of desired compounds from complex mixtures.
2. **Coatings and Adhesives** — Acetone serves as a solvent in the formulation of paints, coatings, and adhesives. Its ability to dissolve various resins makes it an effective component in these products.
3. **Laboratory** — Commonly used as a mobile phase component in reversed-phase high-performance liquid chromatography (HPLC). It aids in separating organic compounds based on their chemical properties.
4. **Industrial Cleaning** — Effective for cleaning and degreasing metal parts and surfaces in industrial settings. Acetone's solvent power removes oils, greases, and other contaminants.
5. **Electronics** — Used as a cleaning agent for circuit boards and electronic components. Its rapid evaporation helps to ensure no residue is left behind.
6. **Cosmetics** — Acetone is a solvent in nail polish removers. It effectively dissolves nail polish for quick and easy removal.

STORAGE & HANDLING

Acetone is a highly flammable liquid, so it must be stored in a cool, dry, well-ventilated area away from heat, sparks, and open flames. Proper storage minimizes the risk of fire and ensures the stability and purity of the product over time.

- Store in a cool, well-ventilated area away from heat sources.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Keep away from strong oxidizers and acids to avoid hazardous reactions.
- Ensure proper PPE, including gloves and goggles, are worn during handling.
- Avoid exposure to light to maintain product integrity.

AVAILABLE PACKAGING

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

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H225: Highly Flammable liquid and vapor [Danger Flammable liquids]
- H319: Causes serious eye irritation [Warning Serious eye damage/eye irritation]
- H336: May cause drowsiness or dizziness [Warning Specific target organ toxicity, single exposure; Narcotic effects]

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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