

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

Alliance Chemical offers high-purity Technical Grade Acetone, a versatile and fast-evaporating solvent essential for industrial applications. Featuring a low APHA color of 5 and minimal water content at 0.35%, this clear, colorless liquid provides consistent performance for critical cleaning and formulation processes.

Grade Significance: Technical Grade indicates a product suitable for industrial and commercial applications where high purity is required, but it is not intended for food, drug, or medicinal use.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Color (APHA)	APHA	5	—	5	ASTM D1209
Specific Gravity (20°C)	g/mL	0.7922	0.791	0.793	Hydrometer @ 25°C
Non Volatile Residue	mg/100mL	0.0010	—	0.0010	ASTM D1353
Water Karl Fischer	%	0.35	—	0.5	ASTM E203 / ISO 6296
Acidity As Acetic	%	0.0002	—	0.0020	Titration per ACS/USP

Values based on 2 batches tested. ND = Not Detected.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear colorless liquid	Odor	Sweet, characteristic odor
Form	Liquid	Boiling Point	133 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-137 °F (NTP, 1992)	Flash Point	0 °F (NTP, 1992)
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 - critical decomposition temperature in air

APPLICATIONS

1. **Analytical Chemistry** — Acetone serves as a reliable mobile phase component in reversed-phase high-performance liquid chromatography, facilitating the precise separation of organic compounds.
2. **Coatings and Adhesives** — Due to its powerful solvency, it is widely used in the formulation of paints and resins to ensure proper viscosity and application consistency.
3. **Pharmaceutical Manufacturing** — It is utilized in liquid-liquid extraction processes to efficiently isolate and purify pharmaceutical intermediates.
4. **Industrial Maintenance** — This solvent is highly effective for heavy-duty cleaning and degreasing of metal parts, removing oils and contaminants before further processing.

STORAGE & HANDLING

Because Acetone has a flash point of 0 °F, it is classified as a highly flammable liquid that requires storage in a cool, well-ventilated, explosion-proof area away from ignition sources. Proper containment is critical to prevent the buildup of flammable vapors and to ensure the longevity and safety of the chemical.

- 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 vapour
- H319: Causes serious eye irritation
- H336: May cause drowsiness or dizziness
- EUH066: Repeated exposure may cause skin dryness or cracking

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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