

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 (C₃H₆O) is a colorless, volatile liquid with a characteristic sweet odor. It is a highly polar solvent, commonly used in various industrial applications due to its excellent solvency properties and ability to dissolve a wide range of organic compounds.

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** — Commonly used as a mobile phase component in reversed-phase high-performance liquid chromatography for separating organic compounds.
2. **Industrial** — Utilized as a solvent in the formulation of paints, coatings, and adhesives due to its ability to dissolve various resins.
3. **Pharmaceutical Manufacturing** — Used in liquid-liquid extraction processes for isolating pharmaceutical intermediates.
4. **Manufacturing** — Effective for cleaning and degreasing metal parts and surfaces in industrial settings.
5. **Research Laboratory** — Serves as a general-purpose solvent in various laboratory applications, including synthesis and analysis.

STORAGE & HANDLING

- 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.

Alliance Chemical | 204 South Edmond St, Taylor, Texas 76574 | 512-365-6838 | www.alliancechemical.com

Disclaimer: The information contained herein is believed to be accurate and represents the best information currently available to us. However, Alliance Chemical makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.