

PRODUCT IDENTIFICATION



Product Name: Methyl Ethyl Ketone (MEK) ACS Grade

CAS Number: 78-93-3

Molecular Formula: C₄H₈O

Molecular Weight: 72.11 g/mol

Grade: ACS Grade

Purity / Concentration: Not Available

Synonyms: Butanone, MEK

PRODUCT OVERVIEW

Methyl Ethyl Ketone (MEK) is a colorless, volatile organic compound with the chemical formula C₄H₈O. It is widely used as a solvent in various industrial applications due to its excellent solvency properties and ability to dissolve a wide range of substances.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	99	99	—	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.805	0.804	0.807	Hydrometer @ 25°C
Residue On Evaporation	ppm	6	—	20	Evaporation
Water Karl Fischer	%	0.06	—	0.2	ASTM E203 / ISO 6296
Acidity As Acetic	ppm	9	—	30	Titration
Distillation Range	°C	79	79	80.5	ASTM D1078

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Volatile clear liquid, colorless, mobile	Odor	Sweet, acetone-like odor
Form	Liquid	Boiling Point	175.3 °F at 760 mmHg (NTP, 1992)
Melting / Freezing Point	-123.3 °F (NTP, 1992)	Flash Point	26 °F (NTP, 1992)
Specific Gravity	0.805	Solubility	High water miscibility, excellent organic solvent
Molecular Formula	C ₄ H ₈ O	Molecular Weight	72.11 g/mol
Vapor Pressure (20°C)	150 mmHg	Viscosity (25°C)	0.43 cP
Refractive Index (20°C)	1.378	Density (25°C)	0.805 g/mL
Partition Coefficient (log P)	0.3	Decomposition Temp.	Not applicable

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, varnishes, and coatings due to its effective solvency.
3. **Manufacturing** — Serves as a thinner for adhesives and sealants, improving application properties.
4. **Pharmaceutical** — Used in the extraction processes for various pharmaceutical compounds.
5. **Maintenance** — Effective in cleaning and degreasing metal parts and machinery.

STORAGE & HANDLING

- Store in a cool, well-ventilated area away from heat sources and open flames.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid contact with strong oxidizing agents and acids.
- Ensure proper PPE, including gloves and goggles, are worn when handling.
- Keep container tightly closed when not in use to minimize evaporation.

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]
- 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

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