

PRODUCT IDENTIFICATION



Product Name: Methyl Ethyl Ketone (MEK) Technical Grade

CAS Number: 78-93-3

Molecular Formula: C₄H₈O

Molecular Weight: 72.11 g/mol

Grade: Technical Grade

Purity / Concentration: 100%

Synonyms: Butanone, 2-Butanone

PRODUCT OVERVIEW

Methyl Ethyl Ketone (MEK) Technical Grade is a high-purity, clear volatile solvent widely recognized for its exceptional solvency power. With a verified assay of 100.0% and low moisture content of 0.02%, it is a reliable choice for industrial formulations and chemical processing.

Grade Significance: Technical Grade signifies that this product is manufactured to meet consistent industrial standards, providing a cost-effective solution for applications where high-purity performance is required but pharmaceutical or food-grade certification is not necessary.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	100.0	99.5	—	GC-FID
Color (APHA)	APHA	3	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.806	0.804	0.807	Hydrometer @ 25°C
Water Karl Fischer	%	0.02	—	0.05	ASTM E203 / ISO 6296
Acidity As Acetic	%	0.0020	—	0.0030	Titration per ACS/USP

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear volatile liquid, pale colorless	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	Miscible with water, alcohols
Molecular Formula	C ₄ H ₈ O	Molecular Weight	72.11 g/mol
Vapor Pressure (20°C)	80 mmHg	Viscosity (25°C)	0.43 cP
Refractive Index (20°C)	1.378	Density (25°C)	0.805 g/mL

APPLICATIONS

1. **Coatings and Adhesives** — MEK acts as a high-performance solvent that effectively dissolves a wide range of polymers, ensuring smooth application and consistent curing for paints and glues.
2. **Analytical Chemistry** — It serves as a critical mobile phase component in reversed-phase HPLC, allowing for the precise separation of organic compounds.
3. **Pharmaceutical Manufacturing** — This solvent is utilized in liquid-liquid extraction processes to isolate and purify sensitive pharmaceutical intermediates.
4. **Industrial Maintenance** — Its strong degreasing properties make it an ideal choice for cleaning metal parts and heavy equipment in demanding industrial environments.

STORAGE & HANDLING

Due to its low flash point of 26 °F, MEK is classified as a highly flammable liquid that requires storage in a cool, well-ventilated area away from ignition sources. Proper containment is essential to prevent the buildup of flammable vapors and to ensure workplace safety.

- 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 oxidizing agents and acids.
- Ensure proper PPE including gloves and goggles are used during handling.
- Avoid exposure to light and moisture to maintain product integrity.

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 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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