

PRODUCT IDENTIFICATION



Product Name: Methyl n-Amyl Ketone (MNAK) ACS Grade

CAS Number: 110-43-0

Molecular Formula: C₇H₁₄O

Molecular Weight: 114.19 g/mol

Grade: ACS Grade

Purity / Concentration: Not Available

Synonyms: 2-Heptanone, Methyl n-amyl ketone

PRODUCT OVERVIEW

Methyl n-Amyl Ketone (MNAK) is a versatile, high-purity ACS Grade solvent characterized by its clear, colorless appearance and excellent solvency power. With an assay of 99% and low moisture content of 0.06%, it serves as an essential component in high-performance coatings and precise chemical synthesis.

Grade Significance: ACS Grade ensures that the chemical meets the rigorous purity standards set by the American Chemical Society, providing the consistency and reliability required for analytical and research-grade applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	99	99	100.0	GC-FID
Color (APHA)	APHA	5	—	10	ASTM D1209
Specific Gravity (20°C)	g/mL	0.8111	0.8091	0.8131	Hydrometer @ 20°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

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Odor	Characteristic ketone odor
Form	Liquid	Boiling Point	300 °F at 760 mmHg (USCG, 1999)
Melting / Freezing Point	-31 °F (USCG, 1999)	Flash Point	102 °F (USCG, 1999)
Specific Gravity	0.815	Solubility	Soluble in organic solvents, slightly soluble in water
Molecular Formula	C ₇ H ₁₄ O	Molecular Weight	114.19 g/mol
Vapor Pressure (20°C)	5.2 mmHg	Viscosity (25°C)	0.75 cP
Refractive Index (20°C)	1.426	Density (25°C)	0.805 g/mL
Partition Coefficient (log P)	2.0-2.6 (estimated)	Decomposition Temp.	Not readily decomposed; stabilizers optional

APPLICATIONS

1. **Paints and Coatings** — Utilized as a high-quality solvent in the formulation of paints and coatings to enhance leveling, flow, and application properties.
2. **Adhesives** — Serves as a critical solvent in adhesive formulations, effectively improving bond strength and optimizing drying times.
3. **Pharmaceuticals** — Used in the extraction and purification of active pharmaceutical ingredients due to its reliable solvency and low residue profile.
4. **Chemical Synthesis** — Acts as a stable intermediate in the synthesis of various complex organic compounds, ensuring consistent reaction results.

STORAGE & HANDLING

MNAK is a flammable liquid with a flash point of 102 °F, requiring storage in a cool, well-ventilated area away from heat, sparks, and open flames. Proper containment is essential to mitigate fire hazards and prevent the accumulation of flammable vapors in the workplace.

- Store in a cool, dry place away from heat sources and open flames.
- Use containers made of HDPE or glass to avoid chemical reactions.
- Ensure proper ventilation in storage areas to prevent vapor accumulation.
- Avoid contact with strong oxidizing agents and acids.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 55 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Warning**



Hazard Statements:

- H226: Flammable liquid and vapour
- H302: Harmful if swallowed
- H332: Harmful if inhaled
- H336: May cause drowsiness or dizziness

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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