TECHNICAL DATA SHEET

Methyl n-Amyl Ketone (MNAK)

Revised: 07/22/2026

PRODUCT IDENTIFICATION

Product Name: Methyl n-Amyl Ketone (MNAK)
CAS Number: 110-43-0
Molecular Formula: $C_7H_{14}O$
Molecular Weight: 114.19 g/mol
Grade: Technical
Purity / Concentration: Not Available
Synonyms: 5-Methyl-2-hexanone, 2-Heptanone

PRODUCT OVERVIEW

Methyl n-Amyl Ketone (MNAK), also known as 2-Heptanone, is a high-purity technical grade solvent characterized by its clear, colorless appearance and excellent solvency. With a verified assay of 99.2% and low water content of 0.02%, this versatile liquid is a staple for high-performance industrial coatings and chemical synthesis.

Grade Significance: Technical grade indicates that the product meets high-standard purity requirements suitable for industrial applications where performance and consistency are critical. It ensures that manufacturers can achieve predictable results in their formulations without the cost of higher-tier analytical grades.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	99.7	99	—	GC-FID
Color (APHA)	APHA	3	—	5	ASTM D1209
Specific Gravity (20°C)	g/mL	0.816	0.804	0.8568	Hydrometer @ 25°C
Water Karl Fischer	%	0.0098	—	0.3	ASTM E203 / ISO 6296
Acidity As Acetic	%	0.0020	0	0.02	Titration per ACS/USP

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	$C_7H_{14}O$	**Molecular Weight**	114.19 g/mol
Vapor Pressure (20°C)	25 mmHg	**Viscosity (25°C)**	0.5 cP
Refractive Index (20°C)	1.426	**Density (25°C)**	0.805 g/mL
Partition Coefficient (log P)	2.0	**Decomposition Temp.**	Not easily decomposed; stable at ambient

APPLICATIONS

1. **Paints and Coatings** — MNAK serves as a high-quality solvent that improves flow and leveling in industrial coatings. Its slow evaporation rate makes it ideal for high-solids formulations.
2. **Pharmaceutical Manufacturing** — It is utilized as a reliable solvent in the extraction and purification of active pharmaceutical ingredients. Its precise chemical profile ensures consistency in sensitive extraction processes.
3. **Chemical Synthesis** — As a reactive intermediate, MNAK is employed in the synthesis of various organic compounds. It provides a stable chemical backbone for complex molecular building.
4. **Industrial Maintenance** — The solvent is an effective cleaning agent for removing stubborn grease and oils from heavy machinery. It leaves minimal residue due to its low ignition profile.

STORAGE & HANDLING

MNAK is a flammable liquid with a flash point of 53°C, necessitating storage in a cool, well-ventilated area away from heat, sparks, or open flames. Proper containment prevents the accumulation of hazardous vapors and ensures the chemical remains stable for industrial use.

- Store in a cool, dry, well-ventilated area away from incompatible materials.
- Use containers made of HDPE or glass to prevent chemical reactions.
- Avoid exposure to heat, sparks, and open flames as MNAK is flammable.
- Ensure proper PPE, including gloves and goggles, are worn when handling.
- Keep away from strong oxidizers and acids to prevent hazardous reactions.

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 vapor [Warning Flammable liquids]
- H302: Harmful if swallowed [Warning Acute toxicity, oral]
- H332: Harmful if inhaled [Warning Acute toxicity, inhalation]

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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