TECHNICAL DATA SHEET

Methyl n-Amyl Ketone (MNAK) Technical Grade

Revised: 08/09/2026

PRODUCT IDENTIFICATION

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

PRODUCT OVERVIEW

Methyl n-Amyl Ketone (MNAK) is a high-purity Technical Grade solvent characterized by its clear, colorless appearance and 99.7% assay. With a low moisture content of 0.0098% and minimal color impact, it is widely utilized as a versatile solvent in industrial coatings and chemical synthesis.

Grade Significance: Technical Grade indicates that this product meets high industrial standards for performance and purity, providing a reliable and cost-effective solution for manufacturing and cleaning applications. It ensures that end users receive consistent chemical properties that are suitable for demanding industrial processes.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay Gc Fid	%	99.7	99	100.5	GC-FID
Color (APHA)	APHA	3	—	5	ASTM D1209
Specific Gravity (20°C)	g/mL	0.8111	0.8091	0.8131	Hydrometer @ 20°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 an essential solvent in the formulation of high-performance paints and coatings. Its excellent solvency properties ensure smooth application and film formation.
2. **Pharmaceuticals** — It is utilized as a critical solvent during the extraction and purification of active pharmaceutical ingredients. Its high purity profile supports rigorous quality control standards.
3. **Chemical Synthesis** — This compound acts as a reliable intermediate in the synthesis of various organic chemical compounds. It facilitates complex reactions by providing a stable and effective reaction medium.
4. **Industrial Maintenance** — MNAK is employed as a heavy-duty cleaning agent for removing stubborn grease and oils from industrial machinery. Its rapid evaporation rate makes it ideal for precision maintenance tasks.

STORAGE & HANDLING

Proper storage is critical because MNAK is a flammable liquid with a flash point of 102 °F, requiring it to be kept away from heat, sparks, and open flames. Maintaining a cool, well-ventilated environment prevents the buildup of flammable vapors and ensures the chemical remains stable and effective for its intended 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 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.

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