

N-Heptane is a highly flammable, straight-chain alkane used as a non-polar industrial and laboratory solvent. It has a boiling point of 98.4°C, making it practical for use at ambient temperatures with reasonable evaporation rates. Less neurotoxic than n-hexane. Used as a denaturant in CDA-12A ethanol and as an extraction/chromatography solvent.

SECTION 1: PRODUCT IDENTIFICATION

Product Name	N-Heptane
CAS Number	142-82-5
Molecular Formula	C7H16 MW: 100.20 g/mol
GHS Signal Word	DANGER
Key Hazards	H225: Highly flammable. H304: Aspiration hazard. H315: Skin irritant. H336: Drowsiness. H411: Aquatic toxicity.
UN Number	UN1206
DOT Classification	Class 3, PG II
Supplier	Cannagas Supply 97 Turnpike Rd, Westborough, MA 01581 877-710-1965 Sales@canna-gas.com

SECTION 2: PHYSICAL & CHEMICAL PROPERTIES

Physical State	Clear, colorless liquid	Density	0.684 g/mL at 20°C
Boiling Point	98.4°C (209.1°F)	Solubility	Practically insoluble (2.93 mg/L)
Flash Point	-4°C (25°F) — Closed Cup	Vapor Density	3.45 (air=1)
Auto-ignition	204°C (399°F)	Log Kow	4.50
Vapor Pressure	53 hPa at 20°C	Neurotoxicity	Lower risk vs n-hexane
LEL / UEL	1.05% / 6.7% in air	H411	Aquatic toxicity

SECTION 3: APPLICATIONS & USAGE

Industrial Solvent	Non-polar solvent for extraction, degreasing, and surface cleaning.
CDA-12A Denaturant	Used as denaturant (~5% v/v) in CDA-12A denatured ethanol formulation.
Chromatography	Suitable mobile phase for normal-phase and preparative chromatography.
Preferred vs Hexane	N-Heptane is preferred over n-hexane where repeated exposure is expected — n-heptane lacks the neurotoxic/reproductive hazard profile of n-hexane.
Extraction	Effective solvent for lipid extraction and non-polar compound purification.

SECTION 4: STORAGE & HANDLING

Storage	Store in sealed containers in a cool, dry, well-ventilated area in a flammable storage cabinet. Keep away from heat, sparks, and ignition sources.
Containers	Compatible with stainless steel, glass. Avoid copper, aluminum alloys for long-term storage.

Handling Use in well-ventilated area or fume hood. Eliminate ignition sources. Ground/bond containers during transfer to prevent static.

Shelf Life Minimum 2 years in original sealed containers stored per above conditions.

SECTION 5: SAFETY SUMMARY

GHS Signal Word DANGER

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DOT Classification Class 3, PG II

SDS Reference Full SDS available. CHEMTREC: 1-800-424-9300.

DISCLAIMER: The information provided in this Technical Data Sheet is based on data believed to be accurate as of the issue date. Cannagas Supply makes no warranty regarding fitness for a particular purpose or accuracy of the information herein. Users are responsible for determining suitability for their specific application. Always refer to the Safety Data Sheet (SDS) for complete safety and regulatory information.