

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** n-Heptane 99% ACS

**Synonyms:** heptane, n-Heptane

**CAS Number:** 142-82-5

**Grade/Purity:** ACS Reagent Grade

**Product Type:** Solvents

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)

**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H410	Very toxic to aquatic life with long lasting effects

**Precautionary Statements:**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, and lighting equipment.
P242	Use non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
P264	Wash hands and face thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, and eye/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice or attention.
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use appropriate media to extinguish.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents and container in accordance with local, regional, national, and international regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	% MIN	% MAX	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Heptane (n-)	99	100	142-82-5	205-563-8	C <sub>7</sub> H <sub>16</sub>	100.20 g/mol
Methylcyclohexane	0	0.5	108-87-2	203-624-3	C <sub>7</sub> H <sub>14</sub>	98.19 g/mol
Isooctane	0	0.3	26635-64-3	247-861-0	C <sub>8</sub> H <sub>18</sub>	114.23 g/mol
Dimethylcyclopentane	0	0.2	28729-52-4	249-193-5	C <sub>7</sub> H <sub>14</sub>	98.19 g/mol

### 4. FIRST-AID MEASURES

<b>Eyes</b>	Eye: IRRIGATE IMMEDIATELY - If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.
<b>Skin</b>	Rinse and then wash skin with water and soap. Refer for medical attention if skin irritation occurs.
<b>Inhalation</b>	Breathing: RESPIRATORY SUPPORT - If a person breathes large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.
<b>Ingestion</b>	Swallow: MEDICAL ATTENTION IMMEDIATELY - If this chemical has been swallowed, get medical attention immediately. (NIOSH, 2024)

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Media</b>	Alcohol-resistant foam, CO <sub>2</sub> , dry chemical powder. Water spray may be used to cool fire-exposed containers.
<b>Unsuitable Media</b>	Do not use a solid water stream — may scatter and spread fire.
<b>Protective Equipment</b>	Wear self-contained breathing apparatus and full protective clothing.
<b>Combustion Products</b>	May include carbon oxides and other toxic fumes. See Section 10.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental</b>	Prevent leakage or spillage from entering drains, sewers, or waterways.
<b>Containment &amp; Cleanup</b>	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

### 7. HANDLING AND STORAGE

<b>Safe Handling</b>	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
<b>Safe Storage</b>	

Store in a cool, dry, well-ventilated area away from heat, sparks, and open flame. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. Ground and bond containers when transferring material.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

AGENCY	EXPOSURE LIMIT
OSHA PEL	500 ppm TWA
NIOSH REL	85 ppm TWA / 440 ppm 15-min STEL
IDLH	750 ppm

<b>Eyes</b>	Wear chemical safety goggles or face shield.
<b>Skin</b>	Wear chemical-resistant gloves and protective clothing.
<b>Inhalation</b>	Use a NIOSH-approved respirator with organic vapor cartridges. For confined spaces or exposures above the OEL, use supplied-air respiratory protection.

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, colorless liquid
<b>Odor</b>	Characteristic
<b>Median Particle Size</b>	Not Applicable
<b>Particle Size Distribution</b>	Not Applicable
<b>Particle Shape</b>	Not Applicable
<b>Surface Area</b>	Not Applicable
<b>Dustiness</b>	Not Applicable
<b>Hygroscopicity</b>	Not Applicable
<b>pH</b>	Not Available
<b>Melting Point</b>	-91°C
<b>Boiling Point</b>	98°C
<b>Flash Point</b>	4°C
<b>Vapor Pressure</b>	Not Available
<b>Specific Gravity</b>	0.684
<b>Solubility</b>	Insoluble in water, soluble in organic solvents
<b>Molecular Formula</b>	C <sub>7</sub> H <sub>16</sub>
<b>Molecular Weight</b>	100.20 g/mol

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Reactions</b>	None under normal processing conditions.
<b>Conditions to Avoid</b>	Heat, sparks, open flame, and incompatible materials.
<b>Incompatible Materials</b>	Strong oxidizing agents, sources of ignition, heat.
<b>Decomposition Products</b>	May produce carbon oxides and other toxic fumes when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

<b>IARC</b>	Not listed as carcinogen.
<b>NTP</b>	Not listed as carcinogen.
<b>OSHA</b>	Not listed as carcinogen.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Daphnia EC50: 0.1 mg/L (96 h, Mysidopsis bahia (opossum shrimp; marine crustacean, not Daphnia)); Fish LC50: 4 mg/L (24 h, Carassius auratus (goldfish); 24-h window (non-standard))
<b>Persistence</b>	Volatilization important (air half-life ~2.2 d) — Biodegradable (101% ThBOD, MITI)
<b>Bioaccumulation</b>	log Kow 4.66, BCF 550 (estimated; high)
<b>Mobility in Soil</b>	Moderate mobility in soil (estimated Koc 240)

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

<b>US DOT</b>	UN1206, Heptanes, 3, PG II
<b>IMDG</b>	UN1206, Heptanes, 3, PG II
<b>IATA/ICAO</b>	UN1206, Heptanes, 3, PG II
<b>Marine Pollutant</b>	No

## 15. REGULATORY INFORMATION

<b>Regulatory listings not yet on file in this system; consult OSHA, EPA TSCA, EPCRA TRI, and California OEHHA directly.</b>	
<b>SARA 311/312</b>	See Section 2 for hazard classifications.

## 16. OTHER INFORMATION

**Revision Date:** 07/01/2026

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