

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: Hydrocarbons

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

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. |

3. COMPOSITION / INFORMATION ON INGREDIENTS

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

4. FIRST-AID MEASURES

| | |
|-------------------|---|
| Eyes | 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. |
| Skin | Rinse and then wash skin with water and soap. Refer for medical attention if skin irritation occurs. |
| Inhalation | 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. |
| Ingestion | Swallow: MEDICAL ATTENTION IMMEDIATELY - If this chemical has been swallowed, get medical attention immediately. (NIOSH, 2024) |

5. FIRE-FIGHTING MEASURES

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

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

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

| | |
|-------------------|---|
| Eyes | Wear chemical safety goggles or face shield. |
| Skin | Wear chemical-resistant gloves and protective clothing. |
| Inhalation | 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

| | |
|--------------------------|---|
| Appearance | Clear, colorless liquid |
| Odor | Characteristic |
| pH | Not Available |
| Melting Point | -91°C |
| Boiling Point | 98°C |
| Flash Point | 4°C |
| Vapor Pressure | Not Available |
| Specific Gravity | 0.684 |
| Solubility | Insoluble in water, soluble in organic solvents |
| Molecular Formula | C ₇ H ₁₆ |
| Molecular Weight | 100.20 g/mol |

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

| | |
|-------------|---------------------------|
| IARC | Not listed as carcinogen. |
| NTP | Not listed as carcinogen. |
| OSHA | Not listed as carcinogen. |

12. ECOLOGICAL INFORMATION

| | |
|-------------------------|---|
| Ecotoxicity | Data not available. Avoid release to the environment. |
| Persistence | Not Available |
| Bioaccumulation | Not Available |
| Mobility in Soil | Not Available |

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

| | |
|-------------------------|----------------------------|
| US DOT | UN1206, Heptanes, 3, PG II |
| IMDG | UN1206, Heptanes, 3, PG II |
| IATA/ICAO | UN1206, Heptanes, 3, PG II |
| Marine Pollutant | No |

15. REGULATORY INFORMATION

| | |
|---------------------------|--|
| TSCA Inventory | All ingredients are listed on the TSCA Active inventory. |
| California Prop 65 | Refer to California Proposition 65 list for current status. |
| SARA 311/312 | See Section 2 for hazard classifications. |
| SARA 313 | Refer to EPA Toxic Release Inventory for current listing status. |

16. OTHER INFORMATION

Revision Date: 04/29/2026

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of publication. It relates only to the specific product identified and does not relate to its use in combination with other materials. ALLIANCE CHEMICAL MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLIANCE CHEMICAL DOES NOT ASSUME LIABILITY FOR LOSS, INJURY, DAMAGE, OR EXPENSE ARISING FROM THE HANDLING, STORAGE, USE, OR DISPOSAL OF THIS PRODUCT.