

TECHNICAL DATA SHEET

n-Heptane 99% Technical

99%

CAS NUMBER  
142-82-5

ALLIANCE CODE  
n-heptane-99-technical

GENERATED  
2026-07-18

1. IDENTITY & COMPOSITION

PRODUCT NAME  
n-Heptane 99% Technical

ALLIANCE CODE  
n-heptane-99-technical

GRADE  
—

CONCENTRATION  
99%

CAS NUMBER  
142-82-5 [PubChem](#)

FORMULA  
C7H16 [PubChem](#)

MOLECULAR WEIGHT  
100.20 [PubChem](#)

PRODUCT TYPE  
solution

AVAILABLE GRADES SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

| GRADE                        | CONCENTRATION | TYPICAL ASSAY | SKU              |
|------------------------------|---------------|---------------|------------------|
| <a href="#">THIS GRADE</a> — | 99%           | —             | current          |
| —                            | 99%           | —             | n-heptane-99-acs |

Typical assay shown is the rolling-window mean from the sibling product's most recent lots. Grade selection drives downstream end-use — verify the sibling grade matches your specification before substitution.

## PHYSICAL & CHEMICAL PROPERTIES

One or more physical-property values are temporarily suppressed pending verification against vendor COA data. For complete properties refer to the Safety Data Sheet (SDS) or contact [sales@alliancechemical.com](mailto:sales@alliancechemical.com).

### FORM

Liquid [Product record](#)

### DENSITY

0.6838 at 68 °F (USCG, 1999) – Less dense than water; will float [Product record](#)

### MELTING POINT

–131 °F (USCG, 1999) [Product record](#)

### VAPOR PRESSURE

37.49 mmHg at 70 °F (USCG, 1999)  
[Product record](#)

### ODOR

Gasoline-like odor [Product record](#)

### BOILING POINT

209.1 °F at 760 mmHg (USCG, 1999)  
[Product record](#)

### FLASH POINT

25 °F (USCG, 1999) [Product record](#)

## MATERIALS OF CONSTRUCTION SERVICE ENVELOPE ≈ 99%

| MATERIAL                      | RATING                          | MAX T (°C) | NOTES                                                   | SOURCE                                               |
|-------------------------------|---------------------------------|------------|---------------------------------------------------------|------------------------------------------------------|
| Buna-N (NBR)<br>Elastomer     | <a href="#">Good</a>            | 80         | Good for non-aromatic hydrocarbons; poor for aromatics. | <a href="#">Parker O-ring Chemical Compatibility</a> |
| EPDM<br>Elastomer             | <a href="#">Not recommended</a> | —          | Swells in hydrocarbons; never use.                      | <a href="#">Parker O-ring Chemical Compatibility</a> |
| Viton (FKM)<br>Elastomer      | <a href="#">Excellent</a>       | 100        | Standard for hydrocarbon service.                       | <a href="#">Parker O-ring Chemical Compatibility</a> |
| PTFE<br>Fluoropolymer         | <a href="#">Excellent</a>       | 200        | Universal.                                              | <a href="#">Cole-Parmer Chemical Compatibility</a>   |
| 316L Stainless Steel<br>Metal | <a href="#">Excellent</a>       | 100        | Inert.                                                  | <a href="#">Cole-Parmer Chemical Compatibility</a>   |

| MATERIAL              | RATING          | MAX T (°C) | NOTES                                      | SOURCE                                             |
|-----------------------|-----------------|------------|--------------------------------------------|----------------------------------------------------|
| Carbon Steel<br>Metal | Good            | 80         | Acceptable for dry hydrocarbons.           | <a href="#">Cole-Parmer Chemical Compatibility</a> |
| HDPE<br>Thermoplastic | Not recommended | —          | Aromatic solvents swell and dissolve HDPE. | <a href="#">Cole-Parmer Chemical Compatibility</a> |

Ratings reflect the service envelope (concentration × temperature) shown. Always confirm against your specific duty cycle and contact-time before equipment selection. The most cautious rating across overlapping references is shown.

## REGULATORY & TRANSPORT

### DOT / 49 CFR

UN NUMBER

UN1206 **Vendor Label**

PACKING GROUP

II **Adjudicated**

HAZARD CLASS

3 **Adjudicated**

PROPER SHIPPING NAME

Heptanes **Adjudicated**

### GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger **Adjudicated**

H-CODES (HAZARD STATEMENTS)

H225, H304, H315, H336, H410

**ECHA CLP Annex VI**

P-CODES (PRECAUTIONARY STATEMENTS)

P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280, P301+P310, P302+P352, P303+P361+P353, P304+P340, P331, P332+P313,...

### OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

500 ppm TWA **OSHA 29 CFR 1910.1000**

NIOSH REL

85 ppm TWA / 440 ppm 15-min STEL  
**NIOSH Pocket Guide**

ACGIH TLV

— **unknown**

NIOSH IDLH

750 ppm **NIOSH Pocket Guide**

Transport descriptions reflect 49 CFR 172.101 lookup at time of publication. Sourced data: ECHA CLP Annex VI for harmonised classifications, NIOSH Pocket Guide for REL/IDLH, OSHA Z-Tables for PEL. Always verify against the latest regulatory text before shipment-critical decisions.

## Supplier Qualification Packet

One zipped download containing the TDS, SDS, latest lot COA (when available), and a fresh Letter of Continuing Guaranty for n-Heptane 99% Technical. Every file included is SHA-256 hashed and listed in a manifest your QA team can audit.

### CATALOG EQUIVALENTS CROSS-REFERENCE VS MAJOR CHEMICAL SUPPLIERS

#### SIGMA-ALDRICH

| SKU                    | GRADE       | CONC. | MATCH | NOTES                   |
|------------------------|-------------|-------|-------|-------------------------|
| <a href="#">246654</a> | ACS Reagent | 99%   | Exact | ACS Reagent $\geq 99\%$ |

Cross-references are informational. Confirm against the manufacturer's current specification before substitution. Competitor trademarks are property of their respective owners.

#### APPLICATION GUIDANCE

n-Heptane 99% Technical is a nonpolar solvent used for hydrocarbon extraction, coatings, and degreasing.

- Coatings, paints, and adhesives
- Industrial degreasing
- Hydrocarbon extraction and recovery
- Rubber and polymer processing
- Cleaning of oil-based residues

Highly flammable and electrostatic-prone. Use grounded transfer equipment and inert gas blanketing where appropriate.

## STORAGE & HANDLING

### RECOMMENDED STORAGE

Cool, well-ventilated flammable-liquid storage. Tightly sealed containers. Segregate from oxidizers. Bond and ground bulk storage;...

### INCOMPATIBILITIES

Strong oxidizers, halogens, nitric acid. Some grades react with rubber and certain plastics — verify gasket and hose compatibility.

For full hazard, PPE, and emergency response guidance, refer to the Safety Data Sheet (SDS) for this product. The SDS controls in all cases where guidance differs.

### HANDLING PRECAUTIONS

Eliminate ignition sources. Use chemical-resistant nitrile or PVA gloves. Bond and ground all transfer equipment. Vapors heavier than air ...

### SHELF LIFE

24 months from date of manufacture in sealed, original packaging

## PACKAGING & LOGISTICS

### SHIPPING DESCRIPTION (US DOT)

UN1206, Heptanes, 3, PG II

Sourced from 49 CFR 172.101. Confirm against shipping documents and carrier requirements before tender.

|                  |                             |                        |
|------------------|-----------------------------|------------------------|
| NMFC CLASS<br>70 | PLACARD<br>Flammable Liquid | PACKING GROUP<br>PG II |
|------------------|-----------------------------|------------------------|

## REVISION HISTORY

Last reviewed 2026-06-18 by Andre Taki, DOT Hazmat Specialist.

| VERSION | DATE       | CHANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TRIGGER          |
|---------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 1.1     | 2026-06-18 | Canonical data re-verified: 3 fields updated against independent vendor SDSs, CLP Annex VI, 49 CFR, and OSHA HazCom 2024 (GHS classification, hazard/precautionary codes, signal word, physical properties as applicable). <ul style="list-style-type: none"><li>countryOfOrigin · canonical adjudication / reground (coa.data_provenance)</li><li>ghsClassification · canonical adjudication / reground (coa.data_provenance)</li><li>hsCode · canonical adjudication / reground (coa.data_provenance)</li></ul> | canonical_change |
| 1.0     | 2026-05-20 | Initial URL-first TDS published from canonical chemistry registry.                                                                                                                                                                                                                                                                                                                                                                                                                                                | initial          |

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This Technical Data Sheet is provided for technical reference. The Safety Data Sheet (SDS) controls in all cases where guidance differs. Values reflect Alliance Chemical canonical data at time of generation; subsequent revisions are recorded in the Revision History above.

ALLIANCE CHEMICAL

## Order n-Heptane 99% Technical

Bulk & packaged sizes · COA/SDS ships with every order