


**n-HEPTANE** www.junyuanpetroleumgroup.com  
 Heptane info@junyuanpetroleumgroup.com

**CAS #: 142-82-5**  
**UN #: 1206**  
**EC Number: 205-563-8**

	<b>ACUTE HAZARDS</b>	<b>PREVENTION</b>	<b>FIRE FIGHTING</b>
<b>FIRE &amp; EXPLOSION</b>	Highly flammable. Vapour/air mixtures are explosive.	NO open flames, NO sparks and NO smoking. Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools.	Use alcohol-resistant foam, dry powder, carbon dioxide, water spray. In case of fire: keep drums, etc., cool by spraying with water.

<b>PREVENT GENERATION OF MISTS!</b>			
	<b>SYMPTOMS</b>	<b>PREVENTION</b>	<b>FIRST AID</b>
<b>Inhalation</b>	Cough. Incoordination. Dizziness. Weakness. Nausea. Drowsiness.	Use ventilation, local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	Redness. Swelling. Pain.	Protective gloves.	Rinse and then wash skin with water and soap. Refer for medical attention if skin irritation occurs.
<b>Eyes</b>	Redness.	Wear safety goggles in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
<b>Ingestion</b>	Aspiration hazard! Sore throat. Abdominal pain. Headache. Dizziness. Nausea. Vomiting. Unconsciousness.	Do not eat, drink, or smoke during work.	Rinse mouth. Give nothing to drink. Do NOT induce vomiting. Refer immediately for medical attention. See Notes.

<b>SPILLAGE DISPOSAL</b>	<b>CLASSIFICATION &amp; LABELLING</b>
Remove all ignition sources. Consult an expert! Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Do NOT wash away into sewer. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Carefully collect remainder. Then store and dispose of according to local regulations.	<p><b>According to UN GHS Criteria</b></p>  <p><b>DANGER</b></p> <p>Highly flammable liquid and vapour            May be fatal if swallowed and enters airways            Causes skin irritation            May cause drowsiness or dizziness            Very toxic to aquatic life with long lasting effects</p> <p><b>Transportation</b>  <b>UN Classification</b>            UN Hazard Class: 3; UN Pack Group: II</p>
<b>STORAGE</b>	
Fireproof. Separated from strong oxidants. Store in an area without drain or sewer access. Provision to contain effluent from fire extinguishing.	
<b>PACKAGING</b>	
Marine pollutant.	

--

**n-HEPTANE**
**PHYSICAL & CHEMICAL INFORMATION**
**Physical State; Appearance**

VOLATILE COLOURLESS LIQUID WITH CHARACTERISTIC ODOUR.

**Physical dangers**

The vapour is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated.

**Chemical dangers**

Reacts violently with strong oxidants. This generates fire and explosion hazard. Attacks many plastics.

Formula: C<sub>7</sub>H<sub>16</sub> / CH<sub>3</sub>(CH<sub>2</sub>)<sub>5</sub>CH<sub>3</sub>

Molecular mass: 100.2

Boiling point: 98.4°C

Melting point: -90.7°C

Density (at 20°C): 0.68 g/ml

Solubility in water, mg/l at 25°C: 2.2 (very poor)

Vapour pressure, kPa at 20°C: 4.6

Relative vapour density (air = 1): 3.5

Flash point: -7°C c.c.

Auto-ignition temperature: 220°C

Explosive limits, vol% in air: 0.8-6.7

Octanol/water partition coefficient as log Pow: 4.66

**EXPOSURE & HEALTH EFFECTS**
**Routes of exposure**

The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

**Effects of short-term exposure**

The substance is irritating to the skin. The vapour is irritating to the respiratory tract. If swallowed the substance easily enters the airways and could result in aspiration pneumonitis. The substance may cause effects on the central nervous system.

**Inhalation risk**

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

**Effects of long-term or repeated exposure**

The substance defats the skin, which may cause dryness or cracking.

**OCCUPATIONAL EXPOSURE LIMITS**

TLV: 400 ppm as TWA; 500 ppm as STEL.

MAK: 2100 mg/m<sup>3</sup>, 500 ppm; peak limitation category: I(1); pregnancy risk group: D.

EU-OEL: 2085 mg/m<sup>3</sup>, 500 ppm as TWA

**ENVIRONMENT**

The substance is toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment.

Bioaccumulation of this chemical may occur in fish. It is strongly advised not to let the chemical enter into the environment.

**NOTES**

The odour warning when the exposure limit value is exceeded is insufficient.

The symptoms of chemical pneumonitis do not become manifest until a few hours or even days have passed.

**ADDITIONAL INFORMATION**
**EC Classification**

Symbol: F, Xn, N; R: 11-38-50/53-65-67; S: (2)-9-16-29-33-60-61-62; Note: C

www.junyuanpetroleumgroup.com  
 info@junyuanpetroleumgroup.com

# n-Heptane

Heptane or n-heptane is the straight-chain alkane with the chemical formula  $\text{H}_3\text{C}(\text{CH}_2)_5\text{CH}_3$  or  $\text{C}_7\text{H}_{16}$ , and is one of the main components of gasoline. When used as a test fuel component in anti-knock test engines, a 100% heptane fuel is the zero point of the octane rating scale. Octane number equates to the anti-knock qualities of a comparison mixture of heptane and isooctane which is expressed as the percentage of isooctane in heptane.



**With over ten years experience, Junyuan Petroleum Group knows the qualities you are seeking with n-Heptane.**

n-Heptane  
CAS No.:142-82-5  
Article No.:00157  
Grade:Extra Pure  
Purity: 99%  
Molecular Formula:  $\text{C}_7\text{H}_{16}$   
H.S. Code:2901.2990

[www.junyuanpetroleumgroup.com](http://www.junyuanpetroleumgroup.com)  
[info@junyuanpetroleumgroup.com](mailto:info@junyuanpetroleumgroup.com)



Junyuan is a renowned manufacturer of n-Heptane. Its core competencies are specialty solvent manufacturing.



Out core competencies are specialty solvent manufacturing.



At maximum capacity, more than 800,000 tons of specialty solvents can be produced here annually.