



Carolina International Sales Co., Inc

MATERIAL SAFETY DATA SHEET

2522 Plantation Center Drive
Matthews, NC 28105
(704) 845 9440

www.ciscochem.com

1. PRODUCT NAME: Heptane
2. CHEMICAL NAME:
3. SYNONYMS:
4. CAS NUMBER: 142-82-5
5. COMPOSITION: Heptane (142-82-5)
100%

**IN CASE OF
TRANSPORT EMERGENCY
CONTACT CHEMTREC
USA: 1-800-424-9300
INTERNATIONAL: 1-703-527-3887**

6. PROPERTIES: ODOR & APPEARANCE: clear, colorless liquid with pleasant gasoline-like odor
ODOR THRESHOLD: 230ppm (350ppm for recognition)
VAPOUR PRESSURE: 40mmHg/5.3kPa (20 c)
EVAPORATION RATE (butyl Acetate=1): 5.5
VAPOR DENSITY (air=1): 3.5
BOILING RANGE: 90 c – 100 c*
FREEZING POINT: -90 c*
SPECIFIC GRAVITY: 0.68*
WATER SOLUBILITY: 0.0003% - 0.3grams per litre
IN OTHER SOLVENTS: soluble in most organic solvents
VISCOSITY: 0.49 centipoise (20 c)
*This product is a mixture of heptane isomers and precise values for some of the above cannot be given.

7. HAZARDS: HMIS (USA): Health - 1, Fire - 3, Reactivity - 1

8. FIRE FIGHTING INFORMATION: FLASH POINT: -4 c/25 F (closed cup)
AUTOIGNITION TEMPERATURE: 204 c/335 F
FLAMMABLE LIMITS: 1.0% - 6.7%
Note: Heptane is less flammable than gasoline or acetone, but liable to ignite under any normal work condition.
COMBUSTION PRODUCTS: carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments
FIREFIGHTING PRECAUTIONS: foam, dry chemical, water fog, water spray only to cool & dilute, product floats on water – water jet spreads flames; firefighters must wear SCBA
STATIC DISCHARGE: this product will accumulate a static charge during agitation or transfer
MECHANICAL IMPACT: not sensitive
CHEMICAL STABILITY: stable; will not polymerize
REACTIVE WITH: strong oxidizing agents; chlorine, fluorine
DECOMPOSITION PRODUCTS: none apart from Hazardous Combustion Products

9. PERSONAL PROTECTION MEASURES: HANDS: nitrile or “Viton” gloves recommended – other types may also be suitable; check with your supplier
EYES: safety glasses with side shields – always protect the eyes
VENTILATION: required to maintain vapor concentrations below 400ppm; organic vapor respirators should be available (in air-tight containers) for escape purposes
CLOTHING: no special clothing required

10. FIRST AID PROCEDURES: SKIN: Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered.
EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there



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is irritation.

INHALATION: Remove from contaminated area promptly. **CAUTION:** Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.

INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

11. **EXPOSURE LIMITS:** TWAEV ppm/mg/m³: 400/1640
LD₅₀ ORAL: 15,000
SKIN (mg/kg): not known
LC₅₀ppm INHALATION: 25,000

12. TOXICOLOGICAL EFFECTS ACUTE EXPOSURE

INFORMATION: SKIN CONTACT: drying, mildly irritating
SKIN ABSORPTION: slight; no toxic effects likely by this route
EYE CONTACT: slightly irritating, will not damage eyes
INHALATION: vapor may irritate above 1000ppm, may cause headache, dizziness, drowsiness
10,000ppm causes narcosis, intoxication, which lead to convulsions and death
INGESTION: almost without effect
EFFECTS OF CHRONIC EXPOSURE
GENERAL: prolonged exposure may cause skin cracking and dermatitis
Note: the neurotoxicity seen after exposure to hexane is not expected with heptane.
SENSITISING: not a sensitizer
REPRODUCTIVE EFFECT: no known effect on humans
SYNERGISTIC WITH: not known
LD₅₀: above 15,000mg/kg (oral, rat)
LC₅₀: 25,000ppm (inhalation, rat) extremely low toxicity

13. **ECOLOGICAL INFORMATION:** This product cannot accumulate in living tissue, this product is readily and rapidly degradable – estimated half-life in: air=2.2days, moving water=3hours, still water 13days.

14. **DISPOSAL CONSIDERATIONS:** DO NOT FLUSH TO SEWER; may be incinerated in approved facility.

15. **CARCINOGENIC PROPERTIES & NOTIFICATIONS:** Not considered a tumorigen or a carcinogen in humans or animals.

16. **TRANSPORT INFORMATION:** USA 49 CFR
Product identification number: UN – 1206
Shipping name: heptanes
Classification: Class 3; Packing group II
Label: Flammable liquid
Class: B2



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17. HANDLING & STORAGE: Store and use a cool dry environment, away from sources of ignition, heat and oxidizing agents. Use with adequate ventilation. Take great care to avoid sparks. Only use non-sparking tools (bronze or aluminium) and explosion-proof equipment near this product. Do not cut, drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.

18. ACCIDENTAL LEAK PRECAUTION: dyke to control spillage and prevent environmental contamination. Fire Potential: blanket spill with foam as a precaution against ignition. Take extreme care to prevent sparks – Use only non-sparking bronze or aluminium tools and explosion-proof electrical equipment nearby. Do not turn other electrical equipment either on or off until spill has been dealt with. Only use explosion-proof forklifts, pumps or other equipment near spill.
 MEASURES: HANDLING SPILL: ventilate contaminated area; recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep & pick up using plastic or aluminium shovel, & store in closed containers for recycling and disposal.

19. REGULATORY INFORMATION: -----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Heptane (142-82-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----

Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Heptane (142-82-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----

Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Heptane (142-82-5)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----

Ingredient	-RCRA-		-TSCA-
	CERCLA	261.33	8(d)
Heptane (142-82-5)	No	No	Yes

Chemical Weapons Convention: No TSCA 12(b): Yes CDTA: No
 SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No
 Reactivity: No (Pure / Liquid)