

SAFETY DATA SHEET: HEPTANE

1. IDENTIFICATION

Product Name: HEPTANE
Synonyms: n-Heptane
Formula and Formula Weight: CH₃(CH₂)₅CH₃ 100.21
Integra numbers beginning with: H232.10; H232.15; H232.50
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company **24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)**
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2. HAZARDS IDENTIFICATION

<u>OSHA Classification:</u>	<u>Hazard Category:</u>	<u>Hazard Statement:</u>
Skin Corrosion/Irritation	2	Causes skin irritation.
Specific Target Organ Toxicity (single exposure)	3	May cause drowsiness or dizziness.
Aspiration Hazard	1	May be fatal if swallowed and enters airways.
Flammable Liquids	2	Highly flammable liquid and vapor.

Signal Word: DANGER



Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
Keep container tightly closed.
Ground, bond container and receiving equipment.
Use explosion-proof electrical, ventilating, lighting equipment.
Use only non-sparking tools and take precautionary measures against static discharge.
Avoid breathing fume, gas, mist, vapors, spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, eye protection, face protection.

Response

If swallowed: Immediately call a poison center, doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with plenty of water or shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center, doctor if you feel unwell.
Specific treatment (see first aid section on this label)
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice, attention.
Take off contaminated clothing and wash it before reuse.

Storage

Store in a well ventilated place. Keep container tightly closed. Keep cool.
Store locked up.

Disposal

Dispose of contents, container in accordance with all governmental regulations.

Hazards Not Otherwise Classified: No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>Synonyms</u>	<u>CAS #</u>	<u>% Weight</u>
Heptane	n-Heptane; Dipropyl methane	00142-82-5	100

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult administer oxygen. Seek medical attention.
Eye Contact: Flush eyes with water for at least 15 minutes. Seek immediate medical attention.
Skin Contact: Remove contaminated clothing. Flush skin with plenty of water. Seek medical attention if irritation develops.

Ingestion: Aspirator hazard. If swallowed, do not induce vomiting. Rinse mouth and give victim water or milk. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Additional notes: Symptoms and effects include dizziness, stupor, incoordination; loss of appetite, nausea; dermatitis; chemical pneumonitis (aspiration liquid); unconsciousness.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Carbon dioxide, dry chemical or alcohol foam. Water may be ineffective.

Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Specific Hazards: Vapors may flow along surfaces to distant ignition sources and flash back.

Hazardous combustion products: Oxides of carbon. Oxides of phosphorus.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Remove all potential ignition sources. Prevent spread of spill. Wear suitable protective equipment. Take up with non-combustible inert material and place into container for disposal. Flush spill area with water. Do not inhale vapors, mist, fumes.

7. HANDLING AND STORAGE

Incompatible Materials: Incompatible with strong oxidizers. Phosphorous, chlorine

Storage and Handling: Store locked up in a cool, dry, well-ventilated flammable liquids storage area or cabinet away from incompatible materials. Keep away from heat and ignition sources. Keep containers tightly closed and protect them from physical damage. Bond and ground containers when transferring liquid. Use only non-sparking tools and take precautionary measures against static discharge. No smoking.

Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Keep container tightly closed.

Ground, bond container and receiving equipment.

Use explosion-proof electrical, ventilating, lighting equipment.

Use only non-sparking tools and take precautionary measures against static discharge.

Avoid breathing fume, gas, mist, vapors, spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, eye protection, face protection.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA & ACGIH Exposure Limits:

Heptane OSHA TWA: 500 ppm; 2000 mg/m³ ACGIH TWA: 400 ppm; 1640 mg/m³ ACGIH STEL: 500 ppm; 2050 mg/m³

Engineering Controls: Use general or local exhaust ventilation to meet TLV and PEL requirements.

Respiratory Protection: Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH approved chemical cartridge respirator with an organic vapor cartridge.

Skin/Eye Protective Equipment: Safety goggles, protective clothing and gloves appropriate for the risk of exposure. Neoprene gloves are recommended.

Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid

Odor: Gasoline-like odor

Odor Threshold: 10 ppm

pH: Not available

Melting/Freezing Point: -91 °C

Initial Boiling Point and Boiling Range: 98 °C

Flash Point: -4 °C

Evaporation Rate: 4.3 Butyl Acetate=1

Flammability: Flammable

Flammable or Explosive Limits (% by volume in air) Upper: 6.7 Lower: 1.1

Vapor Pressure: 4.6 kPa @ 20°C

Vapor Density: 3.5

Relative Density: 0.68 Water=1

Solubility: Insoluble in water.

Partition Coefficient: n-octanol/water 4.66

Auto-Ignition Temperature: 204 °C

Decomposition Temperature: Not available

Viscosity: Not available

10. STABILITY AND REACTIVITY

Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur; vapors may form explosive mixtures with air
Conditions to Avoid: Heat, sparks and open flame. Direct sunlight.
Incompatibles: Incompatible with strong oxidizers. Phosphorous, chlorine
Decomposition Products: Oxides of carbon. Oxides of phosphorus.

11. TOXICOLOGICAL INFORMATION

Effects of Over Exposure:

Inhalation: Harmful if inhaled. Irritating to the upper respiratory tract and mucous membranes. Breathing higher vapor concentrations may cause headaches, vertigo, dizziness, drowsiness, incoordination, nausea, and loss of consciousness.
Skin Contact: May cause skin irritation. Prolonged contact may cause dermatitis.
Eye Contact: Contact may be irritating to the eyes.
Ingestion: Harmful if swallowed. Ingestion may cause nausea, vomiting and gastrointestinal irritation. Aspiration into the lungs may cause chemical pneumonitis.
Chronic Effects: Central nervous system depression. Defatting of the skin. Impaired liver function.
Target Organs: Skin, respiratory system, central nervous system.
Additional Effects: None identified
Reproductive Effects: None identified
Carcinogenicity: None identified

Toxicity Data:

Heptane	LD50 (intravenous, mouse)	222 mg/kg
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12. ECOLOGICAL INFORMATION

Aquatic Toxicity Data:

Terrestrial Toxicity Data:

Heptane	No information available	No information available
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Persistence and degradability: No information available
Bioaccumulative potential: No information available
Mobility in soil: No information available
Other adverse effects: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION

This product is a regulated material for domestic ground transportation, per CFR Title 49.

UN Number:	UN1206
Proper Shipping Name:	Heptanes
Packing Group:	II
Hazard Class:	3
Environmental hazards:	No information available
Special precautions:	No information available
Bulk transport:	No information available

15. REGULATORY INFORMATION

Heptane is listed in the TSCA inventory.

16. OTHER INFORMATION

OSHA SDS #: 25712 rev 101 3/27/2015

NE = Not established, NA = Not applicable or Not available

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***** END OF SDS *****