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# SAFETY DATA SHEET

according to OSHA Hazard Communication 29 CFR Part 1910.1200

## SECTION 1: IDENTIFICATION

Product Name: Heptane Product Code: 10101

Supplied By:  
Commerce Industrial Chemicals, Inc.  
5611 W. Woolworth Avenue  
Milwaukee, WI 53218  
(800) 877-8364

In case of emergency:  
Commerce Industrial Chemicals, Inc.  
(800) 877-8364

## SECTION 2: HAZARD IDENTIFICATION

### GHS Ratings:

Flammable liquid	2	Flash point < 23°C and initial boiling point > 35°C (95°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm2/s at 40° C.

### GHS Hazards

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation

### GHS Precautions

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash ... thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P321	Specific treatment (see ... on this label)
P331	Do NOT induce vomiting
P362	Take off contaminated clothing and wash before reuse
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

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P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	Get medical advice/attention
P370+P378	In case of fire: Use ... for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to ...

**Danger**



**SECTION 3: COMPOSITION**

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
n-Heptane 142-82-5 100.00 percent Vapor Pressure: 39.753 mmHg	500 ppm TWA; 2000 mg/m3 TWA	500 ppm STEL (listed under Heptane, all isomers) 400 ppm TWA (listed under Heptane, all isomers)	NIOSH: 85 ppm TWA; 350 mg/m3 TWA 440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)

**SECTION 4: FIRST AID MEASURES**

**Inhalation:**

- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult
- Vapors may cause dizziness or suffocation.
- Inhalation or contact with material may irritate or burn skin and eyes.
- Call 911 or emergency medical service.

**Eye Contact:**

- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

**Skin Contact:**

- May cause toxic effects if inhaled or absorbed through skin.
- Remove and isolate contaminated clothing and shoes.
- Wash skin with soap and water.
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin.
- Call 911 or emergency medical services.

**Ingestion:**

- Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

**Notes to Physician:**

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

-Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents (e.g. in enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

## SECTION 5: FIRE FIGHTING MEASURES

Flash Point: -4 C (25 F)

- Vapors may form explosive mixtures with air.
- Vapors may travel to source of ignition and flash back.
- Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
- Vapor explosion hazard indoors, outdoors or in sewers.
- Runoff to sewer may create fire or explosion hazard.
- Containers may explode when heated.
- Many liquids are lighter than water.

**Caution: This product has a very low flashpoint: Use of water spray when fighting fire may be inefficient.**

**Caution: For mixtures containing alcohol or polar solvent, alcohol-resistant foam may be more effective.**

Small Fire:

- Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant

Large Fire:

- Water spray, fog or alcohol-resistant foam.
- Do not use straight streams.
- Move containers from fire area if you can do it without risk.

**Hazardous Combustion Products:**

- Combustion may yield smoke, carbon monoxide and other products of incomplete combustion.

**Special protective actions for firefighters:**

For

fires

beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard

**FIREFIGHTING EQUIPMENT:**

- Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**-Highly Flammable-Will be easily ignited by heat, sparks or flames.**

- Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).
- All equipment used when handling the product must be grounded.
- Do not touch or walk through spilled materials.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- A vapor suppressing foam may be used to reduce vapors.
- Absorb or cover with dry earth, sand, or other non-combustible material and transfer to containers.
- Use clean non-spraying tools to collect absorbed material.

**LARGE SPILLS:**

- Dike far ahead of liquid spill for later disposal.
- Water spray may reduce vapor; but may not prevent ignition in closed spaces.

## SECTION 7: HANDLING AND STORAGE

Handling:

- Keep away from ignition sources such as heat/sparks/open flame. No Smoking.
- Use only in a well ventilated area.
- Avoid breathing vapor, fumes or mist.
- Avoid contact with eyes, skin, and clothing.

- Ground and bond containers when transferring material.
- Use spark-proof tools and explosion proof equipment.
- Always open containers slowly to allow any excess pressure to vent.
- After opening, purge container with nitrogen before reclosing.
- Follow all SDS/label precautions even after containers are emptied because they may retain product residue.

**STORAGE:**

- Keep away from heat, sparks, and flame.
- Store containers in a cool, well ventilated place.
- Keep containers closed when not in use.
- Storage under nitrogen atmosphere is recommended.
- Do not allow to evaporate to near dryness.
- Protect from direct sunlight.

<b>SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</b>			
<b>Chemical Name / CAS No.</b>	<b>OSHA Exposure Limits</b>	<b>ACGIH Exposure Limits</b>	<b>Other Exposure Limits</b>
n-Heptane 142-82-5	500 ppm TWA; 2000 mg/m3 TWA	500 ppm STEL (listed under Heptane, all isomers) 400 ppm TWA (listed under Heptane, all isomers)	NIOSH: 85 ppm TWA; 350 mg/m3 TWA 440 ppm Ceiling (15 min) ; 1800 mg/m3 Ceiling (15 min)

**Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety or engineering professionals.**

**RESPIRATORY PROTECTION:** Wear positive pressure self-contained breathing apparatus (SCBA).

**PROTECTIVE CLOTHING:** Structural firefighters' protective clothing will only provide limited protection.

**SKIN PROTECTION:** Wear impervious gloves to prevent contact with the skin. Wear protective gear as needed-suit, boots.

**EYE PROTECTION:** Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent)

**OTHER PROTECTIVE EQUIPMENT:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**HYGENIC PRACTICES:** Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

**Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety or engineering professionals.**

<b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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<p><b>Appearance:</b> Colorless Transparent Liquid</p> <p><b>Vapor Pressure:</b> No Data</p> <p><b>Vapor Density:</b> 3</p> <p><b>Density:</b> No Data</p> <p><b>Freezing point:</b> No Data</p> <p><b>Boiling Range F:</b> 199-210</p>	<p><b>Odor:</b> Characteristic Hydrocarbob Solvent</p> <p><b>Odor threshold:</b> No Data</p> <p><b>pH:</b> No Data</p> <p><b>Melting point:</b> No Data</p> <p><b>Solubility:</b> No Data</p> <p><b>Flash point:</b> 3.5</p>
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<b>Evaporation rate:</b> No Data <b>Explosive Limits:</b> 1.0-6.7  <b>Autoignition temperature:</b> No Data <b>Viscosity:</b> No Data	<b>Flammability:</b> No Data <b>Partition coefficient (n-octanol/water):</b> No Data <b>Decomposition temperature:</b> No Data <b>Grams VOC less water:</b> No Data
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**SECTION 10: STABILITY AND REACTIVITY**

**Stability:**

STABLE

**Incompatibilities:**

Avoid contact with strong oxidizing agents and strong reducing agents.

**Hazardous Decomposition:**

Not anticipated under normal conditions of use.

Hazardous polymerization will not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Mixture Toxicity**

Oral Toxicity LD50: 5,000mg/kg  
Dermal Toxicity LD50: 3,000mg/kg  
Inhalation Toxicity LC50: 103mg/L

**Component Toxicity**

142-82-5      n-Heptane  
Oral LD50: 5,000 mg/kg (Mouse)    Dermal LD50: 3,000 mg/kg (Rabbit)    Inhalation LC50: 103 g/m3

**Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal.**

**Information of Toxicological Effects:**

**Aspiration Hazard:** May be fatal if swallowed and enters airways.

**Skin Corrosion/Irritation:** Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

**Eye Damage/Irritation:** Causes mild eye irritation.

**Specific Target Organ Toxicity (Repeated Exposure):** May cause damage to organs through prolonged or repeated exposure.

**Central Nervous System**

**Skin**

**Respiratory System**

**Effects of Overexposure**

CAS Number

Description

% Weight

Carcinogen Rating

**SECTION 12: ECOLOGICAL INFORMATION**

Component Ecotoxicity  
n-Heptane

96 Hr LC50 Cichlid fish: 375.0 mg/L

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Always dispose of any waste in accordance with all local, state, and federal regulations.**

**SECTION 14: TRANSPORT INFORMATION**

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Heptane	UN1206	PG II	3

**SECTION 15: REGULATORY INFORMATION**

NJ Right to Know Chemicals:  
142-82-5 n-Heptane 100.00 %

Pennsylvania Right to Know Chemicals:  
142-82-5 n-Heptane 100.00 %

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
USA	CERCLA	No
	TSCA	No

**SECTION 16: OTHER INFORMATION**

**Hazardous Material Information System (HMIS)**

HEALTH	<input type="text" value="1"/>	HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH
FLAMMABILITY	<input type="text" value="3"/>	
PHYSICAL HAZARD	<input type="text" value="0"/>	
PERSONAL PROTECTION	<input checked="" type="checkbox"/>	

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Reviewer Revision

**The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the products are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability for loss, damage or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product this SDS may not be**

**applicable. It is the responsibility of the user to comply with all Federal, State and Local laws and regulations.**

