



Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Hexane (n-Hexane)	
NCL Catalog Number	H-7P	
Product Description	Laboratory chemical	
Manufacturer	EMD Chemicals Inc.	PO Box 70, 480 Democrat Road Gibbstown, NJ 08027
Supplier	NCL of Wisconsin, Inc. Telephone: 1-800-648-7836 Email: nclabs@nclabs.com	PO Box 8, Birnamwood, WI 54414 Fax: 715-449-2454 Emergency Contact: 1-800-424-9300 (Chemtrec)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Flammable Liquids	Category 2
Skin Irritation	Category 2
Reproductive Toxicity	Category 2
Specific Target Organ Toxicity	Single Exposure Category 3
Specific Target Organ Toxicity	Repeated Exposure Category 2
Aspiration Hazard	Category 1
Acute Aquatic	Category 2
Chronic Aquatic	Category 2



Signal Word

Danger

Hazard Statements

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs (Nervous system) through prolonged or repeated exposure if swallowed.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe mist/vapors/spray.
P264	Wash exposed skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification

None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	Not applicable
Common Name	Not applicable

Substance – Main Constituent

Name	CAS #	Approximate %
n-Hexane	110-54-3	100

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures	Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
If Inhaled	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor if you feel unwell.
In Case of Skin Contact	Remove all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor if you feel unwell.
In Case of Eye Contact	Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor if you feel unwell.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor if you feel unwell. Ingestion of large quantities: immediately take to the hospital.

Most Important Symptoms/Effects Acute and Delayed

No additional information.

Indication of Immediate Medical Attention and Special Treatment Needed

Seek medical attention if exposed.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable Extinguishing Media	Do not use a heavy water stream.
Special Hazards Arising from the Substance or Mixture	Highly flammable. Gas/vapor flammable with air within explosion limits. May be ignited by sparks. Gas/vapors spreads at floor level.

Reactivity Upon combustion: CO and CO₂ are formed. Reacts violently with many compounds; strong oxidizers. Violent to explosive reaction with some acids.

Special Protective Equipment and Precautions for Fire-Fighters Wear self-contained breathing apparatus and protective clothing. Cool tanks/drums with water spray/remove them to safety. Do not move the load if exposed to heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions Prevent entry to sewers and public waters. Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark and explosion proof appliances and lighting equipment. Keep containers closed. Wash contaminated clothing before reuse.

Methods and Materials for Containment and Cleaning Up Collect spillage with inert absorbent material. Store away from other materials. Wash clothing/equipment after handling. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Handling and Storage

Precautions for Safe Handling Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Conditions for Safe Storage Including any Incompatibilities Keep in original container tightly closed, stored in a cool, dry, ventilated area. Store away from sunlight, which can contribute to instability. Store away from; heat sources, ignition sources, oxidizing agents, strong acids, water and moisture. Fireproof storeroom. Meet legal requirements.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

n-Hexane (110-54-3)		
USA OSHA	OSHA TWA	180 mg/m ³
USA OSHA	OSHA PEL (TWA)	50 ppm/180 mg/m ³
USA ACGIH	ACGIH TLV (ppm)	50 ppm
USA OSHA	OSHA PEL	500 ppm/1800mg/m ³

Appropriate Engineering Controls Material should be handled or transferred in a fume hood or with equivalent ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

Individual Protection Measures Avoid all unnecessary exposure.

Skin Protection Protective gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Eye Protection Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Respiratory Protection Wear appropriate mask.

Other Information Do not eat, drink, or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Color	Colorless
Odor	Characteristic
Odor Threshold	130 ppm
pH	Not determined
Melting Point/Freezing Point	-139.4°C
Initial Boiling Point and Boiling Range	38.9°C
Flash Point	-23.15°C: Closed cup
Evaporation Rate	6.82
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	7.5% / 1.1%
Vapor Pressure	Not determined
Vapor Density	3
Relative Density	Not determined
Density	Not determined
Solubility	Partial soluble in water
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	224.85°C
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Not available.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible Materials	Strong oxidizers.
Hazardous Decomposition Products	When heated to decomposition, can emit toxic gases, carbon dioxide, and carbon monoxide. May release flammable gases.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity Not classified

n-Hexane (110-54-3)	
LD50 oral rat	25,000 mg/kg
LD50 inhalation rat	48000 ppm

Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure)	May cause drowsiness or dizziness.
Specific Target Organ Toxicity (Repeated Exposure)	May cause damage to organs through prolonged or repeated exposure.
Aspiration Hazard	May be fatal if swallowed and enters airways.

Potential Adverse Human Health Effects and Symptoms

Harmful if swallowed.

Chronic Symptoms

Prolonged or repeated contact with skin may cause: defatting, dermatitis. Contact with eyes can cause redness, blurred visions, and provoked tears. Effects due to ingestion may include gastrointestinal discomfort, central nervous system depression, lung irritation, chest pain, pulmonary edema, giddiness, slowed reaction time, slurred speech, headache, dizziness, drowsiness, and unconsciousness.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

n-Hexane (110-54-3)	
LC50 fishes 1	2.5 mg/l: 96 h
EC50 daphnia 1	3878 mg/l: 48 h
EC50 algae 1	12840 mg/l: 3 h
EC50 algae 2	0.30 mg/l: 8 h

Persistence and Degradability

No data available.

Bioaccumulative Potential

Log Pow: -0.31
Bioaccumulative potential: Low potential for bioaccumulation (Log Kow < 4)

Mobility in Soil

Surface tension: 0.022 N/m (20°C)

Other Adverse Effects

Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations

Dispose of contents/containers in accordance with local, state, and federal regulations.

Ecology-Waste Materials

Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	1208
UN Shipping Name	Hexanes
Transport Hazard Class(es)	3
Packing Group	II
Environmental Hazards	Not applicable
Transport in Bulk	Not applicable
Special Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

n-Hexane (110-54-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

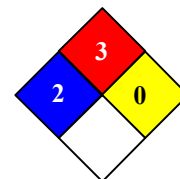
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NFPA Hazards

Health Hazard 2: Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.

Fire Hazard 3: Liquids and solids that can be ignited under almost all ambient temperature conditions.

Reactivity/Instability 0: Normally stable, even under fire exposure conditions, and is not reactive with water.



HMIS III Rating

Health 2: Temporary or minor injury may occur.

Flammability 3: Materials capable of ignition under almost all normal temperature conditions.

Physical Hazard 0: Materials that are normally stable, even under fire conditions.

Personal Protection F

H-7P	
Health	2
Flammability	3
Physical Hazard	0
Personal Protection	F

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END OF SAFETY DATA SHEET