



Date: 3/1/2019

Product Code

SAFETY DATA SHEET

1. Identification

Product Name: n-Hexane
Product Code:
SDS Date: 7/15/2020

Address: USA Lab
12400 Belden Ct Livonia,
Michigan, 48150
Phone: 734-855-4890

CHEMTREC (1-800-424-9300)

2. Hazard(s) Identification

GHS Classification

Flammable Liquid, Category 2
Aspiration Toxicity, Category 1
Specific Target Organ Systemic Toxicity Repeated Exposure, Category 2
Reproductive Toxicity, Category 2
Specific Target Organ Systemic Toxicity Single Exposure, Category 3
Skin Irritation, Category 2
Acute Aquatic Toxicity, Category 2
Chronic Aquatic Toxicity, Category 2

Pictogram



Signal Word Danger

Hazard Statement

H225 Highly flammable liquid and vapour
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H336 May cause drowsiness or dizziness
H361 Suspected of damaging fertility
H373 May cause damage to peripheral nervous system through prolonged or repeated exposure
H411 Toxic to aquatic life with long lasting effects

Precautionary

P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.
P240+P243 Ground/bond container and receiving equipment. Take precautionary measures against static discharge.
P273+P202 Avoid release to the environment. Do not handle until all safety precautions have been read and understood
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310+P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P370+P378 In case of fire: Use foam, carbon dioxide or dry powder extinguisher for extinction.
P403+P235+P233 Store in a well-ventilated place. Keep cool. Keep container tightly closed

3. Composition/Information On Ingredients

Name	EC No	Cas	Concentration
n-Hexane	203-777-6	110- 54-3	>65 w%
Methylcyclopentane	202-503-2	96-37-7	10-25 w%
2-Methylpentane	203-523-4	107-83-5	1-10 w%
3-Methylpentane	202-481-4	96-14-0	10-20 w%
Cyclohexane	203-806-2	110-82-7	0-2 w%

4. First-aid Measures

If Inhaled:

If breathing difficulties, dizziness, or light-headedness occur when working in areas with high vapour concentrations, remove victim to fresh air. If victim experiences continued breathing difficulties, keep patient warm and at rest, and seek medical attention. If breathing stops, begin artificial respiration and seek immediate medical attention.

In Case of Skin Contact:

If this product comes into contact with the skin. Remove contaminated clothing and wash with soap and water before re-use. Seek medical attention if irritation persists.

In Case of Eye Contact:

If this product comes into contact with the eyes, flush with large quantities of water for several minutes, while gently holding the eyelids open. Seek medical attention if irritation persists.

If Swallowed:

If this product is swallowed, DO NOT INDUCE VOMITING. Give small quantities (<250 ml) of water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed:

Inhalation: n-Hexane may cause dizziness and drowsiness if inhaled, and high concentrations may result in central nervous system depression, and loss of consciousness. Repeated or prolonged exposure to n-hexane may cause peripheral neuropathy, with symptoms including weakness and numbness of the extremities, headache and blurred vision.

Ingestion: Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness and central nervous system depression. If vomiting occurs, n-hexane may be aspirated into the lungs, with a risk of chemical pneumonitis.

Reproductive toxicity: n-Hexane is classified as hazardous to reproduction. n-Hexane has been found to cause testicular damage in laboratory animals.

Indications of Any Immediate Medical Attention and Special Treatment Needed:

If ingested, seek medical attention immediately. If product comes in contact with either the skin or the eyes immediately flush with water for at least 15 minutes.

5. Fire-fighting Measures

Extinguishing Media:

Small fires: Use foam, carbon dioxide or dry powder extinguisher.

Large fires: Use foam to extinguish fires. Water spray should not be used, as n-hexane is lighter than water and may form pools of burning liquid on top of water. Keep adjacent containers cool using water spray.

Products of Combustion:

n-Hexane is extremely flammable. Remove all sources of ignition. Vapors are heavier than air and may travel considerable distances to a source of ignition and flash back. Vapor/air mixtures may be explosive. Electrostatic discharges may cause fire and/or explosion.

Advice for Firefighters

Wear positive pressure Self Contained Breathing Apparatus.

HAZARD	GHS	NFPA
Health	4	1
Fire	2	3
Reactivity	5	0

6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Remove all ignition sources and evacuate unnecessary personnel from the area. Ventilate the area if possible. Wear suitable protective clothing including solvent resistant gloves and coveralls. If vapor concentrations are high, respiratory protective equipment may be required. See section 8 for more information.

Environmental Precautions:

Prevent entry into sewers and watercourses. If product enters sewers or watercourses, inform the appropriate environmental authorities.

Methods and Materials for Containment and Clean Up:

Small spills: Remove all ignition sources. Use non-sparking hand tools. Take precautions to avoid electrostatic discharge. Absorb spillage in a non-combustible absorbent, e.g. sand or vermiculite, and place in a suitable container for disposal.

Large spills: Remove all ignition sources. Use non-sparking hand tools. Contain spill and cover if possible to reduce evaporation. Transfer to a suitable container by mechanical means. Take precautions to avoid static discharge, e.g. by grounding (earthing) containers, etc. Consider initial downwind evacuation for at least 300 meters (1,000 feet).

7. Handling and Storage

Safe Handling:

Avoid contact with skin and eyes. Use only in well ventilated areas. n-Hexane is extremely flammable. Avoid contact with all ignition sources, including hot surfaces. Take precautions to avoid electrostatic discharges, such as grounding of containers and equipment, and restricting flow rates. Vapors are heavier than air and may accumulate in low lying areas and below ground areas such as ducts and sewers.

Safe Storage:

Store in a well ventilated area away from all ignition sources. If stored in drums, keep out of direct sunlight.

8. Exposure Controls/Personal Protection

Name	TWA	IDLH	Source, Type
n-Hexane	50 ppm 180 mg/m ³		NIOSH (REL)
n-Hexane	500 ppm 1800 mg/m ³		OSHA (PEL)
n-Hexane		1100 ppm	NIOSH
Cyclohexane	200 ppm 700 mg/m ³		NIOSH

Exposure Control:

Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids. General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted TLV ranges. If general ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required. Other special precautions such as respiratory masks or environmental containment devices may be required in extreme cases.

Eye/Face Protection:

Wear suitable eye protection, safety glasses or goggles, when handling this product.

Hand Protection: Wear suitable chemical resistant gloves recommended for use with hydrocarbon solvent. Nitrile gloves may be suitable, but glove manufacturers' specifications should always be checked first. Natural rubber gloves are not suitable. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Body Protection: Aprons or coveralls are recommended. These should be changed after use or if contaminated. Wash before re-use.

Respiratory Protection: Use only in well ventilated area. If exposure levels are likely to exceed the OEL then suitable respiratory protection will be required. Very high vapor concentrations may result in oxygen displacement and self-contained breathing apparatus or airline may be required.

Control of Environmental Exposure:

9. Physical and Chemical Properties

Appearance:	n-Hexane	Colorless Liquid
Odor:	n-Hexane	Gasoline-like odor
pH:	n-Hexane	Not Applicable
Melting/Freezing Point:	n-Hexane	Not Applicable
Initial Boiling Point/Range:	n-Hexane	150-161°F/65-72°C
Flash Point:	n-Hexane	-9°F/-23°C
Evaporation Rate:	n-Hexane	Not Available
Flammability limits in air (Lower)	n-Hexane	1.1 v%
Flammability limits in air (Upper)	n-Hexane	8.7 v%
Vapor Pressure at 100°F:	n-Hexane	6.3 psia
Vapor Density:	n-Hexane	3
Relative Density at 60°F:	n-Hexane	0.68 kg/l
Water Solubility:	n-Hexane	negligible
Partition Coefficient:	n-Hexane	3.6
Auto-Ignition Temperature"	n-Hexane	473°F/245°C
Viscosity:	n-Hexane	Not Applicable

10. Stability and Reactivity

Reactivity: Stable under normal conditions.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Keep away from sources of ignition.

Incompatible Materials: This product is incompatible with strong oxidizing agents, strong acids and bases, and selected amines.

Hazardous Decomposition Products: None

11. Toxicological Information

Name:	n-Hexane	CAS:	110- 54-3
LD50 (Rat, oral) 28,700 mg/kg. LC50 (Rat, inhalation) 271,040 mg/m ³ (77 000 ppm) 1 hour			
However, it can be harmful when inhaled in high concentrations or ingested. n-Hexane may cause dizziness and drowsiness if inhaled, and high concentrations may result in central nervous system depression, and loss of consciousness. Symptoms of ingestion may include nausea, vomiting, as well as symptoms of dizziness, drowsiness and central nervous system depression. If vomiting occurs, n-hexane may be aspirated into the lungs, with a risk of chemical pneumonitis.			
Irritation:	n-Hexane can	n-Hexane can be classified as irritating to the eye; may cause redness and irritation at high vapor concentrations or if splashed into the eye. n-Hexane is classified as irritating to the skin, and may produce redness and irritation. Prolonged or repeated contact of this product will result in defatting of the skin, causing dryness and cracking.	
Corrosivity:	Not corrosive		
Sensitisation:	Not known to be a sensitiser		
Repeated dose toxicity:	Repeated or prolonged exposure to n-hexane may cause peripheral neuropathy, with symptoms including weakness and numbness of the extremities, headache and blurred vision.		
Carcinogenicity:	Not expected to be carcinogenic		
Mutagenicity:	Not expected to be mutagenic		
Toxicity for reproduction:	n-Hexane is classified as hazardous to reproduction. n-Hexane has been found to cause testicular damage in laboratory animals.		
Route of exposure:	Inhalation and Ingestion		
Symptoms related to the physical, chemical and toxicological characteristics:			
nausea, vomiting, as well as symptoms of dizziness, drowsiness and central nervous system depression. If vomiting occurs, n-Hexane may be aspirated into the lungs, with a risk of chemical pneumonitis. n-Hexane may cause dizziness and drowsiness if inhaled, and high concentrations may result in central nervous system depression, and loss of consciousness.			

12. Ecological Information

Name	CAS	Toxicity
n-Hexane	110-54-3	LC50 (Daphnia magna) >50 mg/l (24 hr) LC50 (Goldfish) 4 mg/l (24 hr)
n-Hexane is classified as toxic to aquatic organisms and likely to cause long term effects in the environment.		
n-Hexane is expected to be inherently biodegradable in aquatic systems, however, in view of its high evaporation rate, n-hexane is expected to volatilize rapidly from water sources into the atmosphere, where it will be degraded by photochemical reaction.		

13. Disposal Considerations

Recover and recycle product if possible. If recovery and recycling are not possible, n-hexane may be disposed of by incineration.

14. Transportation Information

Proper Shipping Name: Hexanes

Hazard Class 3

Identification Number: UN1208

Packing Group: II

Label Flammable

Ship: UN1208 HEXANES CLASS 3 PG II

15. Regulatory Information

Clean Air Act:	<ul style="list-style-type: none">• This product neither contains nor was it manufactured with any class 1 or class 2 ozone depleting substances.• None of the components of this product have a threshold quantity under section 112 (r), 40 CFR Part 68.
EPCRA	<ul style="list-style-type: none">• Section 302- This product does not contain any constituents that are classified as an extremely hazardous substance.• Section 311/312- This product is considered a fire hazard, an acute health hazard, and a chronic health hazard.• Section 313- Cyclohexane and n-hexane, both constituents of this product, are considered toxic chemicals.
CERCLA	<ul style="list-style-type: none">• N-hexane has a CERCLA reportable quantity of 5000 lbs.• Cyclohexane has a CERCLA reportable quantity of 1000 lbs.
PROP 65	Proposition 65- This product contains none of the chemicals which may cause cancer or birth defects as listed in this legislation.
CONEG	This product contains no lead, mercury, cadmium, or hexavalent chromium.
New Jersey Right-to-Know	All constituents of this product except 3-methylpentane appear on this state's hazardous substance list.
Pennsylvania Right-to-Know	All constituents of this product appear on this state's hazardous substance list.
TSCA	All constituents of this product are listed in TSCA.

16. Other Information, Including Date of Preparation or Last Revision

SDS Date: 7/15/2020

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