



Safety Data Sheet

Hexanes

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: n-Hexane; 95% Pesticide, GC, ACS, HPLC

Synonyms/Generic Names: Hexane

Product Number: CP-B1496, CP-C1496, CP-C1490, CP-E1490, CP-C1492, CP-B1493, CP-C1493, 2538

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: ChemPure Brand Chemicals
39103 Warren Road
Westland, MI 48185

For More Information Call 734-729-1805 (Monday-Friday 8:00-4:30)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Flammable liquid, Target Organ Effect, Irritant, Reproductive hazard

Target Organs: Peripheral nervous system, Kidney, Testes

Signal Word: Danger

Pictograms:



GHS Classification:

Flammable liquids	Category 2
Skin irritation	Category 2
Eye irritation	Category 2B
Reproductive toxicity	Category 2
Specific target organ toxicity-single exposure, Central nervous system	Category 3
Specific target organ toxicity-single exposure, Oral, Nervous system	Category 2
Aspiration hazard	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

GHS Label Elements, including precautionary statements:

Hazard Statements:

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315+H320	Causes skin and eye 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:

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P273	Avoid release to the environment.
P281	Use personal protective equipment as required.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.

Potential Health Effects

Eyes	Causes eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage.

NFPA Ratings

Health	2
Flammability	3
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	2
Fire	3
Reactivity	0
Personal	G

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
n-Hexane	>60	110-54-3	203-777-6	C ₆ H ₁₄	86.18 g/mol

4. FIRST-AID MEASURES

Eyes	Immediately rinse with plenty of water for at least 15 minutes and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide on fires involving this material. Use appropriate media for adjacent fire. Cool unopened containers with water.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from	Flammable in the presence of a source of ignition when the temperature

the chemical	is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section).
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Neutralize spill with sodium bicarbonate or lime. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Store away from all sources of ignition. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
n-Hexane	500 ppm 1760 mg/m ³	TLV	ACGIH
	1000 ppm 3500 mg/m ³	STEL	ACGIH
	500 ppm 1800 mg/m ³	PEL	OSHA
	50 ppm 180 mg/m ³	REL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses or goggles, and face shield.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, and full body covering. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid.
Odor	Gasoline-like or petroleum-like.
Odor threshold	130 ppm
pH	7.0
Melting point/freezing point	-95°C (-139°F)
Initial boiling point and boiling range	68°C (154.4°F)
Flash point	CLOSED CUP: -22.5°C (-8.5°F)
Evaporation rate	15.8
Flammability (solid, gas)	Flammable
Upper/lower flammability or explosive limit	LOWER: 1.15% UPPER: 7.5%
Vapor pressure	341.3 hPa (256 mmHg) at 37°C (100 °F) 176.0 hPa (132 mmHg) at 20°C (68°F)
Vapor density	2.97 (Air = 1)
Density	0.66 (Water = 1)
Solubility (ies)	Soluble in diethyl ether, acetone. Insoluble in cold water, hot water.
Partition coefficient: n-octanol/water	log Pow: 3.90 - 4.11
Auto-ignition temperature	225°C (437°F)
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Heat, ignition sources. Moisture may affect product quality.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Skin	Not Available
Eyes	Not Available
Respiratory	LC50 Inhalation - rat - 4h – 48,000 ppm
Ingestion	LD50 Oral - rat - 25,000 mg/kg

Carcinogenicity

IARC	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.
Eyes	Irritation, redness, watering eyes, itchiness, blurred vision.
Respiratory	Irritation, coughing, wheezing, dizziness, drowsiness, chest pain.
Ingestion	Irritation, nausea, vomiting, diarrhea, discomfort, slurred speech, slowed reaction time.

Chronic Toxicity	May cause damage to the following organs: peripheral nervous system, skin, central nervous system.
Teratogenicity	Not Available
Mutagenicity	Mutagenic for bacteria and/or yeast.
Embryotoxicity	Not Available
Specific Target Organ Toxicity- Single Exposure	May cause drowsiness or dizziness.
Specific Target Organ Toxicity- Repeated Exposure	Ingestion - May cause damage to organs through prolonged or repeated exposure. - Nervous system
Reproductive Toxicity	Overexposure may cause reproductive disorder(s) based on tests with laboratory animals. Suspected human reproductive toxicant. Suspected of damaging fertility.
Respiratory/Skin Sensitization	Not Available
Aspiration Hazard	May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Vertebrate	LC50 - Pimephales promelas (fathead minnow) - 2.5 mg/l - 96.0 h
Aquatic Invertebrate	EC50 - Daphnia magna (Water flea) - 3,878.00 mg/l - 48 h
Terrestrial	EC50 - Chlorella vulgaris (Fresh water algae) - 12,840.00 mg/l - 3 h EC50 - SKELETOMA - 0.30 mg/l - 8 h

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

Waste Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN1208, Hexanes, 3, pg II
TDG	UN1208, HEXANES, 3, pg II
IMDG	UN1208, HEXANES, 3, pg II
Marine Pollutant	No
IATA/ICAO	UN1208, Hexanes, 3, pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 312	Fire Hazard, Acute Health Hazard, Chronic Health Hazard
SARA 313	Listed: n-Hexane
WHMIS Canada	Class B-2 - Flammable and combustible material - Flammable liquid Class D-2A - Poisonous and infectious material - Other effects - Very toxic Class D-2B - Poisonous and infectious material - Other effects - Toxic

16. OTHER INFORMATION

Revision	Date
Revision 1	03/22/2013
Revision 2	08/07/2013

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