



# Material Safety Data Sheet

Catalog Number: 300118  
Revision date: 26-Apr-2006

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 300118

Product name: N-HEXANE 95%, GC GRADE

Synonyms: Hexane; Esani; Gettysolve-B

**Supplier:**

MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
N-HEXANE	110-54-3	90 - 100%	50 ppm TWA	500 ppm TWA; 1800 mg/m <sup>3</sup> TWA

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Harmful to flora, fauna, soil organisms and aquatic organisms., Flammable, Harmful: danger of serious damage to health by prolonged exposure through inhalation, skin contact and if swallowed.

**Category of Danger:**

Harmful , Dangerous for the environment , Flammable , Repr. cat. 3

**Principle routes of exposure:** Skin

**Inhalation:** Harmful: possible risk of irreversible effects through inhalation.

**Ingestion:** Harmful: danger of serious damage to health if ingested.

**Skin contact:** Harmful: danger of serious damage to health by prolonged skin contact.

**Eye contact:** Risk of serious damage to eyes

**Statements of hazard** HARMFUL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

Flammable

**Statement of Spill or Leak - ANSI Label** Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

**Precautions - ANSI Label** Do not breathe vapors or spray mist Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

## 4. FIRST AID MEASURES

**General advice:** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation:** Move to fresh air. Call a physician immediately.

**Skin contact:** Rinse immediately with plenty of water and seek medical advice

**Ingestion:** Induce vomiting if person is conscious. Drink 1 or 2 glasses of water.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Protection of first-aiders:** No information available

**Medical conditions aggravated by exposure:** None known

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam, Halons, Use dry chemical, CO<sub>2</sub>, water spray or `alcohol` foam.

**Specific hazards:**

A very dangerous fire hazard. A dangerous explosion hazard when exposed to heat or flame. Mixtures with dinitrogen tetroxide may explode at 28°C.

**Unusual hazards:**

None known

**Special protective equipment for firefighters:**

Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes.

**Specific methods:**

Water mist may be used to cool closed containers.

**Flash point:**

Not determined

**Autoignition temperature:**

225 °C (447 °F)

**NFPA rating:**

NFPA Health:	1
NFPA Flammability:	3
NFPA Reactivity:	0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Use personal protective equipment.

**Environmental precautions:**

Prevent product from entering drains.

**Methods for cleaning up:**

Ground and bond containers when transferring material

## 7. HANDLING AND STORAGE

**Storage:**

ROOM TEMPERATURE

**Handling:**

Use only in area provided with appropriate exhaust ventilation.

**Safe handling advice:**

Remove and wash contaminated clothing before reuse. Wear personal protective equipment.

**Technical measures/storage conditions:**

Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition

**Incompatible products:**

Oxidising and spontaneously flammable products

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

### PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

**Hand protection:** Pvc or other plastic material gloves

**Skin and body protection:** Long sleeved clothing Impervious clothing

**Eye protection:** If splashes are likely to occur, wear: Safety glasses with side-shields

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Odor</b>	Colorless; faint petroleum odor
<b>Physical state:</b>	Liquid
<b>Formula:</b>	C6-H14
<b>Molecular weight:</b>	86.18
<b>Melting point/range:</b>	-95 °C (-139 °F)
<b>Boiling point/range:</b>	69 °C (156 °F)
<b>Density:</b>	0.66 at 20 °C (water = 1)
<b>Vapor pressure:</b>	124 mm Hg at 20 °C 150 mm Hg at 24.8 °C
<b>Evaporation rate:</b>	Specific data not available - rapid
<b>Vapor density:</b>	2.97 (air = 1)
<b>Solubility (in water):</b>	Insoluble
<b>Flash point:</b>	Not determined
<b>Autoignition temperature:</b>	225 °C (447 °F)

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Polymerization:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Thermal decomposition can lead to release of irritating gases and vapours such as carbon oxides.
<b>Materials to avoid:</b>	Strong oxidising agents
<b>Conditions to avoid:</b>	Exposure to air or moisture over prolonged periods.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

#### Acute toxicity

Components  
N-HEXANE

**RTECS Number:**  
MN9275000

#### Selected LD50s and LC50s

Inhalation LC50 Rat : 48000 ppm/4H  
Oral LD50 Rat : 28710 mg/kg

<b>Chronic toxicity:</b>	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
<b>Local effects:</b>	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>Specific effects:</b>	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
<b>Primary irritation:</b>	No data is available on the product itself.
<b>Carcinogenic effects:</b>	No data is available on the product itself.
<b>Mutagenic effects:</b>	No data is available on the product itself.
<b>Reproductive toxicity:</b>	Reprotoxic category 3 corresponds to `substances which cause concern for human fertility`.

Components  
N-HEXANE

#### NIOSH - Health Effects

#### NIOSH - Target Organs

skin, eyes, respiratory system, CNS, PNS

## 12. ECOLOGICAL INFORMATION

<b>Mobility:</b>	No data available
<b>Bioaccumulation:</b>	No data available

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**Ecotoxicity effects:  
Aquatic toxicity:**

No data available  
May cause long-term adverse effects in the aquatic environment.

<b>Components</b>	<b>U.S. DOT - Appendix B - Marine Pollutan</b>	<b>U.S. DOT - Appendix B - Severe Marine Pollutants</b>	<b>United Kingdom - The Red List:</b>
N-HEXANE	Not Listed	Not Listed	Not Listed
<b>Components</b>	<b>Germany VCI (WGK)</b>	<b>World Health Organization (WHO) - Drinking Water</b>	<b>Ecotoxicity - Fish Species Data</b>
N-HEXANE	1	Not Listed	LC50 (96 hr) rainbow trout:4.14 mg/L.;LC50 (96 hr) fathead minnow:5.10 mg/L.;LC50 (96 hr) bluegill:4.12 mg/L.:
<b>Components</b>	<b>Ecotoxicity - Freshwater Algae Data</b>	<b>Ecotoxicity - Microtox Data</b>	<b>Ecotoxicity - Water Flea Data</b>
N-HEXANE	Not Listed	Not Listed	LC50 (48 hr) water flea:3.87 mg/L.:
<b>Components</b>	<b>EPA - ATSDR Priority List</b>	<b>EPA - HPV Challenge Program Chemical List</b>	<b>California - Priority Toxic Pollutants</b>
N-HEXANE	Not Listed	indicator 4; Fully and ICCA sponsored	Not Listed
<b>Components</b>	<b>California - Priority Toxic Pollutants</b>	<b>California - Priority Toxic Pollutants</b>	
N-HEXANE	Not Listed	Not Listed	

**13. DISPOSAL CONSIDERATIONS****Waste from residues / unused products:**

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

**Contaminated packaging:  
Methods for cleaning up:**

Do not re-use empty containers  
Ground and bond containers when transferring material

**14. TRANSPORT INFORMATION**

**UN/Id No:** 1208

**DOT:**

**Proper shipping name:** Hexanes  
**IATA Hazard Label(s):** Flammable Liquid  
**Hazard Class:** 3 - Flammable liquid  
**Packing group:** II

**Emergency Response Guide Number (ERG):** 128

Components  
N-HEXANE

**U.S. DOT - Appendix A Table 1 - Reportable Quantities**  
RQ = 5000 pounds (2270 kg)

**TDG (Canada):**

**WHMIS hazard class:**

D2b toxic materials  
B2 flammable liquids



**IMDG/IMO**

**Proper shipping name:**

Hexanes

**IMDG - Hazard Classifications**  
**IMDG - Regulated Substances**

IMDG class or division = 3  
UN1208

Components

**U.S. DOT - Appendix B - Marine Pollutan**

**U.S. DOT - Appendix B - Severe Marine Pollutants**

N-HEXANE

Not Listed

Not Listed

**IMO-labels:**

**15. REGULATORY INFORMATION**

**International Inventories**

**Components**

N-HEXANE

**Inventory - United States TSCA - Sect. 8(b)**

Present

**Canada DSL Inventory List -**

Present

**Australia (AICS):**

Present

**Inventory - China:**

Present

**EU EINECS List -**

203-777-6; C6H14

**Inventory - Japan:**

2-6

**Korean KECL:**

KE-18626

**Philippines PICCS:**

Present

**U.S. regulations:**

**Components**

N-HEXANE

**California Proposition 65**

-  
Not Listed

**Massachusetts Right to**

**Know List:**  
[present]

**New Jersey Right to**

**Know List:**  
sn 1340

**Pennsylvania Right to Know**

**List:**  
[present]

**Components**

N-HEXANE

**Florida substance List:**

[present]

**Rhode Island Right to**

**Know List:**  
Toxic, Flammable

**Illinois - Toxic Air**

**Contaminants**  
Present on HAP list

**Connecticut - Hazardous Air**

**Pollutants**  
3,600 ug/m<sup>3</sup> HLV; 1 ppmv HLV

**Components**

N-HEXANE

**SARA 313 Emission reporting/Toxic Release of Chemicals**

form R reporting required for 1.0% de minimis concentration

**CERCLA/SARA - Section 302 Extremely Haz**

Not Listed

**NTP:**

None

**IARC:**

None

**SARA 313 Notification:**

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

**State Notification:**

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

<b>16. OTHER INFORMATION</b>
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**Prepared by:** Health & Safety

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**End of Safety Data Sheet**