

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: **n-HEXANE 99**
Supplier: **LABSCAN LIMITED,
T24-26 STILLORGAN INDUSTRIAL PARK, STILLORGAN,
CO. DUBLIN, IRELAND.**
Emergency telephone number: **+353 1 295 2684** Fax No: **+353 1 295 2685**

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Identification of the preparation | n-Hexane | | | |
|-----------------------------------|----------|--------------|---|----------|
| Chemical Name | CAS-No | EEC-No | Class | Weight % |
| n-HEXANE | 110-54-3 | 601-037-00-0 | F; R11 Xi; R38 Xn; R48/20 R62 R65 R67 N; R51/53 | > 99 |

3. HAZARDS IDENTIFICATION

Most important hazards: Highly flammable.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Specific hazards Use only in well ventilated areas. The vapour has narcotic effect and in high concentrations induces unconsciousness which can be fatal.
In use, may form flammable/explosive vapour-air mixture.
May impair fertility. Toxic to aquatic organisms.
May be harmful if swallowed - damages Lungs

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.

Inhalation: In case of shortness of breath, give oxygen. Move to fresh air in case of accidental inhalation of vapours. Keep patient warm. Apply artificial respiration only if patient is not breathing or under medical supervision. Obtain medical attention.

Skin contact: Remove soaked clothing immediately and wash affected skin with soap and water. Wash contaminated clothing before re-use.

Eye contact: If the substance has got into the eyes, wash out with water or saline solution for at least 15 minutes Obtain medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision
Never give anything by mouth to an unconscious person.

Product name: **n-HEXANE 99****5. FIRE-FIGHTING MEASURES****Suitable extinguishing media:**

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Extinguishing media which must not be used for safety reasons:

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards:

none reasonably foreseeable.

Special protective equipment for firefighters:

Wear self-contained breathing apparatus and protective suit.

Specific methods:

Standard procedure for chemical fires. Water mist may be used to cool closed containers.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions:**

Evacuate personnel to safe areas. Remove all sources of ignition. Shut off leaks if without risk. Wear self-contained breathing apparatus and protective suit. Keep people away from and upwind of spill/leak.

Environmental precautions:

Do not let product enter drains. Contain or absorb leaking liquid with sand or earth. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil or vegetation, advise police.

Methods for cleaning up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer to covered steel drums. Dispose of promptly.

7. HANDLING AND STORAGE**Handling:**

Use only in well-ventilated areas. Handle under a hood. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Storage:

Keep tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Store in original container (+15C-+25C). Electrical equipment should be protected to the appropriate standard.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Chemical Name:**

n-HEXANE

National occupational exposure limits:

EH40: OES 50ppm (180mg/m³) 8h TWA

Engineering measures to reduce exposure

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REF: LS3536

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents or in hot melt applications.

Personal protection equipment:

- **Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment
- **Hand protection:** Nitrile rubber gloves. 89/686/EEC and EN374.
- **Eye protection:** Goggles giving complete protection to eyes.
- **Skin and body protection:** Rubber or plastic boots. Chemical resistant apron / complete suit protecting against chemicals.

Hygiene measures:

Keep working clothes separately. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--|---|------------------------|-------------------------|
| Formula: | CH₃(CH₂)₄CH₃ | | |
| Form: | liquid. | | |
| Colour: | colourless. | | |
| Odour: | oily, hydrocarbon-like. | | |
| pH: | (°C) | no data available | (g/l H ₂ O) |
| Boiling point/range: | | 67-69 | °C |
| Melting point/range: | | -95 | °C |
| Decomposition temperature: | | no data available | °C |
| Flash point: | | -26 | °C |
| Autoignition temperature: | | 240 | °C |
| Flammability (solid, gas): | highly flammable | | |
| Explosive properties: | no data available | | |
| Explosion limits: | - lower | 1.2 | vol. % |
| | - upper | 7.4 | vol. % |
| Oxidizing properties: | no data available | | |
| Vapour pressure: | (°C) | no data available | hPa |
| Relative density: | (20 °C) >= | 0.66 g/cm ³ | |
| | | <= | |
| Bulk density: | | 675 | kg/m ³ |
| Solubility: | | | |
| Water solubility | (20 °C) | 0.1 | g/l) |
| Solubility in other solvents | | | |
| Partition coefficient (n-octanol/water) | | | |
| Viscosity: | (20 °C) | 0.47 | mPa.s |

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions,

Product name: **n-HEXANE 99**

Conditions to avoid: Strong heating

Materials to avoid: strong oxidizing agents. Unsuitable working materials: plastics and rubber.

Hazardous decomposition products: carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Inhalation :
LC50/inhalation/4h/rat = 48000 ppm (V) /High concentration of vapours may induce unconsciousness, nausea, headache, dizziness, vomiting, cyanosis.

Skin contact
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye contact :
slight Irritant effect on eyes

Ingestion :
LD50/oral/rat = 28710mg/kg. After swallowing, nausea. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

Sensitization: not sensitizing

Long term toxicity: Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

Chronic toxicity: Chronic exposure may cause permanent damage of health.

12. ECOLOGICAL INFORMATION

Mobility: Distribution preferentially in air. Immiscible with water. Lighter than water.

Persistence / degradability:
Readily biodegradable, according to appropriate OECD test.
BOD 2.21 g/g, COD 0.04 g/g, TOD 3.52 g/g

Bioaccumulation: Concentration in organisms possible. BCF: 242-453. log P(o/w) >3. Appreciable bioaccumulation potential expected

Ecotoxicity: C.auratus 4mg/l/24h. Daphnia: 2.1 mg/l/48h.
Algas 1079mg/l/96h.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
If recycling is not practicable, dispose of in compliance with local regulations.
Can be incinerated, when in compliance with local regulations.

Contaminated packaging:
Empty containers can be landfilled after cleaning, when in compliance with local regulations.

Product name: **n-HEXANE 99****14. TRANSPORT INFORMATION****ADR/RID**

Proper shipping name: Hexane

| | | | |
|-------------------------|--------|------------------|------|
| Class: | 3/3(b) | Item: | 6.4 |
| Packaging group: | II | HI/UN No: | 1208 |

IMO

| | | | |
|------------------------------|--------|-------------------|------|
| Proper shipping name: | Hexane | IMDG Page: | 3129 |
| Class: | 3.1 | MFAG: | 310 |
| EmS: | 3-07 | UN-No: | 1208 |
| Packaging group: | II | | |
| Marine pollutant: | No | | |

ICAO

| | | | |
|------------------------------|--------|------------------|------|
| Proper shipping name: | Hexane | UN/ID No: | 1208 |
| Class: | 3 | | |
| Packaging group: | II | | |

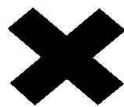
15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations
2001/58/EC

- Contains: Hexane
- Symbol(s):



F - Highly flammable.



Xn - Harmful



N - Dangerous for the environment

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R -phrase(s): R11 - Highly flammable.
R38 - Irritating to skin.
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65 - Harmful: may cause lung damage if swallowed.
R67 - Vapours may cause drowsiness and dizziness.

S -phrase(s): S 2 - Keep out of reach of children.
S 9 - Keep container in a well-ventilated place
S16 - Keep away from sources of ignition - No smoking.
S29 - Do not empty into drains
S33 - Take precautionary measures against static discharges
S60 - This material and/or its container must be disposed of as hazardous waste.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets
S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

16. OTHER INFORMATION

Recommended restrictions: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Take notice of labels and material safety data sheets for the working chemicals.

Recommended use: General purpose solvent.

Further information: Contact Labscan Limited

REVISION DATE: 21/08/2002

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.