

# MATERIAL SAFETY DATA SHEET (MSDS)

00161

# N-HEXANE 99% LR

#### 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : N-HEXANE 99% LR

Product code : SS0108900500 Identification of the product : n-Hexane

> CAS No: 110-54-3 EC No :203-777-6 Annex No :601-037-00-0

Chemical formula : C6H14 - CH3(CH2)4CH3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

SUVCHEM

Company identification Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

#### 2.1. Classification of the substance or mixture

# Classification EC 67/548 or EC 1999/45

Classification : F; R11

Repr. Cat. 3; R62 Xn; R65-48/20

R67 Xi; R38 N; R51-53

#### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Reproductive toxicity - Fertility - Category 2 - Warning (CLP : Repr. 2) H361

Specific Target Organ Toxicity - Single exposure - Respiratory tract irritation -

Category 3 - Warning (CLP : STOT SE 3) H335

Specific Target Organ Toxicity - Single exposure - Narcotic effects - Category 3 -



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

## **N-HEXANE 99% LR**

# 2. Hazards identification -DSD (continued)

Warning (CLP: STOT SE 3) H336

Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP:

STOT RE 2) H373

Aspiration hazard - Category 1 - Danger (CLP: Asp. Tox. 1) H304 Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315

: Flammable liquids - Category 2 - Danger (CLP : Flam. Liq. 2) H225 **Physical hazards** 

**Environmental hazards** : Hazardous to the aquatic environment - Chronic hazard - Category 2 (CLP:

Aquatic Chronic 2) H411

#### 2.2. Label elements

#### Labelling EC 67/548 or EC 1999/45

Symbol(s)







Symbol(s) : F: Highly flammable

Xn: Harmful

N: Dangerous for the environment

R Phrase(s) : R11 : Highly flammable. R38: Irritating to skin.

R48/20: Harmful: danger of serious damage to health by prolonged exposure

through inhalation.

R62: Possible risk of impaired fertility.

R65: Harmful: may cause lung damage if swallowed. R67: Vapours may cause drowsiness and dizziness.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

S Phrase(s) S2: Keep out of the reach of children.

S9: 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.

S36/37: Wear suitable protective clothing and gloves.

S61: Avoid release to the environment. Refer to special instructions/Safety data

S62: If swallowed, do not induce vomiting: seek medical advice immediately and

show this container or label.

**Contains** : n-Hexane

#### <u>Labelling Regulation EC 1272/2008 (CLP)</u>

#### **Hazard pictograms**











# MATERIAL SAFETY DATA SHEET (MSDS)

00161

### **N-HEXANE 99% LR**

# 2. Hazards identification -DSD (continued)

Signal words

**Hazard statements** : H225 : Highly flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H361f: Suspected of damaging fertility.

H315: Causes skin irritation.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

**Precautionary statements** 

 General : P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

P201: Obtain special instructions before use.

: P240: Ground/bond container and receiving equipment. Prevention

P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.

P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking. P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment. P233: Keep container tightly closed. P264: Wash thoroughly after handling.

 Response : P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

> P302+P352: IF ON SKIN: Wash with plenty of soap and water. P308+P313: If exposed or concerned : get medical advice. P332+P313: If skin irritation occurs: Get medical advice.

P391: Collect spillage.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position

comfortable for breathing.

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated

clothing. Rinse skin with water/shower. P363: Wash contaminated clothing before reuse. P314: Get medical advice if you feel unwell. P370+P378: In case of fire: Use for extinction.

: P403+P233: Store in well-ventilated place. Keep container tightly closed. Storage

P403+P235: Store in well-ventilated place. Keep cool.

P405: Store locked up.

 Disposal considerations : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

**Contains** : n-Hexane

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

# N-HEXANE 99% LR

## 3. Composition/information on ingredients

Substance / Preparation : n-Hexane

EC No :203-777-6 Annex No :601-037-00-0

Substance.

Substance name

Contents

CAS No 110-54-3 EC No 203-777-6 Annex No 601-037-00-0 REACH Ref.

Classification F; R11 Repr. Cat. 3; R62 Xn; R65-48/20 R67 Xi; R38 N; R51-53

Flam. Liq. 2 \_ H225 Asp. Tox 1 \_ H304 Repr. 2 \_ H361f Skin Irrit 2 \_ H315 STOT SE 3 \_ H335 STOT RE 2 \_ H373 STOT SE 3 \_ H336 Aquatic Chronic 2 \_ H411

Contains no other components or impurities which will influence the classification of the product.

### 4. First aid measures

### 4.1. Description of first aid measures

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a

POISON CENTER or doctor if you feel unwell.

**Skin contact** : Wash contaminated clothing before reuse. If skin irritation occurs : Get medical

advice. Specific treatment (see on this label). Remove/Take off immediately all

contaminated clothing. Wash with plenty of soap and water.

**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or

redness persist.

Ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or

doctor.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Causes damage to organ.

May be fatal if swallowed and enters airways.

Suspected of damaging fertility.

Causes skin irritation. May cause respiratory irritation.

May cause drowsiness or dizziness.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**General information** : Never give anything by mouth to an unconscious person.

If exposed or concerned : get medical advice.



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

# N-HEXANE 99% LR

## 5. Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media**: Do not use a heavy water stream.

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

### 5.2. Special hazards arising from the substance or mixture

Flammable class : Highly flammable liquid and vapour.

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory

protection.

Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

#### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.

Ventilate area.

Avoid breathing dust, fume, gas, mist, vapours, spray.

**Technical measures** : Use special care to avoid static electric charges.

Special precautions : Remove ignition sources. No naked lights. No smoking.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Clean up methods : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

possible. Collect spillage. Store away from other materials.

## 6.4. Reference to other sections

See section 8. Exposure controls/personal protection



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

## N-HEXANE 99% LR

## 7. Handling and storage

#### 7.1. Precautions for safe handling

Handling : Handle empty containers with care because residual vapours are flammable. Wash

thoroughly after handling. Use only outdoors or in a well-ventilated area. Obtain

special instructions before use.

**Technical protective measures**: Provide good ventilation in process area to prevent formation of vapour.

Proper grounding procedures to avoid static electricity should be followed. Use

explosion-proof electrical, ventilating, lighting, ..., equipment.

**Special precautions** : No naked lights. No smoking. Avoid breathing dust, fume, gas, mist, vapours,

spray.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep in fireproof

place. Ground/bond container and receiving equipment. Keep container tightly

closed.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s) : None.

## 8. Exposure controls/personal protection

# 8.1. Exposure controls

Personal protection : Avoid all unnecessary exposure.

• Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection

equipment is recommended. Wear respiratory protection.

• Hand protection : Wear protective gloves.

Skin protection
 Eye protection
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.

• Others : When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

#### 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

# N-HEXANE 99% LR

# 9. Physical and chemical properties (continued)

Physical state at 20 °C : Liquid.

Colour: Clear ColorlessOdour: Gasoline-likeOdour threshold: No data available.pH value: No data available.

Melting point [°C] : -95 °C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : 225 °C

Flammability (solid, gas) : Highly flammable liquid and vapour.

Flammable.

Flash point [°C] : -23 °C

Boiling point [°C] : 68 - 70 °C

Initial boiling point [°C] : 68°C

Final boiling point [°C] : 70 °C

Evaporation rate : N/A

Vapour pressure [20°C] : N/A

Vapour pressure mm/Hg : 151 mm Hg @ 25 deg C

Vapour density : 2,97

Density [g/cm3] : 0,678

Relative density, gas (air=1) : N/A

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : Insoluble.

Solubility in water : N/A

Log Pow octanol / water at 20°C : No data available.

Solubility : N/A

Viscosity at 40°C [mm2/s] : 0.31 mPas 20 deg C

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : 7,50%
Explosion limits - lower [%] : 1,10%

Oxidising properties : No data available.

# 10. Stability and reactivity

### 10.1. Reactivity



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

### N-HEXANE 99% LR

# 10. Stability and reactivity (continued)

**Reactivity** : Not established.

10.2. Chemical stability

**Chemical stability** : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Not established.

10.4. Conditions to avoid

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

May release flammable gases.

### 11. Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity

Inhalation : May be fatal if swallowed and enters airways.

Dermal : Based on available data, the classification criteria are not met.

Ingestion : May be fatal if swallowed and enters airways.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Causes skin irritation.

May cause respiratory irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction: Suspected of damaging fertility.STOT-single exposure: May cause drowsiness or dizziness.

**STOT-repeated exposure** : May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** : May be fatal if swallowed and enters airways.



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

# N-HEXANE 99% LR

## 12. Ecological information

12.1. Toxicity

**Toxicity information** : Toxic to aquatic life with long lasting effects.

12.2. Persistence - degradability

**Persistence - degradability** : May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

**Environmental precautions** : Avoid release to the environment.

## 13. Disposal considerations

## 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Handle empty containers with care because residual vapours are flammable.

Hazardous waste due to toxicity.

### 14. Transport information

#### 14.1. Land transport (ADR-RID)

Proper shipping name : HEXANES UN N° : 1208 : 33



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

# N-HEXANE 99% LR

# 14. Transport information (continued)

ADR - Class : 3

**Labelling - Transport** : 3 : Flammable liquid.



ADR - Classification code : F1
ADR - Group : II

ADR - Packing instructions : P001 R001

ADR - Limited Quantity : 1 L

ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and

E. Other carriage: Passage forbidden through tunnels of category E.



#### 14.2. Sea transport (IMDG) [English only]

Proper shipping name : HEXANES UN N° : 1208

**IMO-IMDG - Class or division** : 3 : Flammable liquid.

IMO-IMDG - Packing group: IIIMO-IMDG - Packing instructions: P001IMO-IMDG - Limited quantities: 1 LIMO-IMDG - Marine pollution: YesEMS-Nr: F-E S-D

## 14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : HEXANES UN N° : 1208

IATA - Class or division : 3 : Flammable liquid.

IATA - Packing group : ||

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 35

instruction

- Passenger and Cargo - Maximum : 5 L

Quantity/Packing

IATA - Cargo only : ALLOWED - Cargo only - Packing instruction : 364



# MATERIAL SAFETY DATA SHEET (MSDS)

00161

## N-HEXANE 99% LR

# 14. Transport information (continued)

- Cargo only - Maximum Quantity/ : 60 L

**Packing** 

IATA - Limited Quantites : 1 L ERG-Nr : 3H

## 15. Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental

regulations/legislation specific for the

substance or mixture

**REACH Restrictions - Annex XVII** 

REACH Authorisation - Annex XIV

: Ensure all national/local regulations are observed.

The components of this product are not subject to restrictions.The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

## 16. Other information

Revision - See : \*

**Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF

THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and

1999/45/EC, and amending Regulation (EC) No 1907/2006

**List of relevant R phrases (heading 3)**: R11: Highly flammable.

R38: Irritating to skin.

R48/20 : Harmful : danger of serious damage to health by prolonged exposure

through inhalation.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R62: Possible risk of impaired fertility.

R65 : Harmful : may cause lung damage if swallowed. R67 : Vapours may cause drowsiness and dizziness.

List of full text of H-statements in

section 3

: H225 : Highly flammable liquid and vapour.

H304 : May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H335: May cause respiratory irritation. H336: May cause drowsiness or dizziness. H361f: Suspected of damaging fertility.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.



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# N-HEXANE 99% LR

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

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**End of document**