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| <b>N-HEXA DECANE</b><br><b>CAS NO 544-76-3</b> | <b>MATERIAL SAFETY DATA SHEET</b><br><b>SDS/MSDS</b> |
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifiers**

Product name : n-Hexa Decane

CAS-No. : 544-76-3

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
 7/28 Vardaan House  
 New Delhi -110002  
 INDIA

Telephone : +91 11 49404040  
 Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**

Aspiration hazard (Category 1), H304

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



GHS08

Signal word : Danger

Hazard statement(s)  
 H304

May be fatal if swallowed and enters airways.

Precautionary statement(s)  
 P301 + P310  
 P331

IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 Do NOT induce vomiting.

Supplemental Hazard information (EU)  
 EUH066

Repeated exposure may cause skin dryness or cracking.

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.  
Repeated exposure may cause skin dryness or cracking.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Cetane  
Formula : C<sub>16</sub>H<sub>34</sub>  
Molecular weight : 226.45 g/mol  
CAS-No. : 544-76-3  
EC-No. : 208-878-9

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component         |           | Classification    | Concentration |
|-------------------|-----------|-------------------|---------------|
| <b>Hexadecane</b> |           |                   |               |
| CAS-No.           | 544-76-3  | Asp. Tox. 1; H304 | <= 100 %      |
| EC-No.            | 208-878-9 |                   |               |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## **SECTION 6: Accidental release measures**

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hygroscopic. Handle and store under inert gas.

Storage class (TRGS 510): Combustible liquids

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |   |   |
|---|---|
| a) Appearance                                   | Form: liquid<br>Colour: colourless        |
| b) Odour  | odourless                                 |
| c) Odour Threshold                              | No data available                         |
| d) pH   | No data available                         |
| e) Melting point/freezing point                 | Melting point/range: 18 °C - lit.         |
| f) Initial boiling point and boiling range      | 287 °C - lit.                             |
| g) Flash point                                  | 135 °C - closed cup                       |
| h) Evaporation rate                             | No data available                         |
| i) Flammability (solid, gas)                    | No data available                         |
| j) Upper/lower flammability or explosive limits | No data available                         |
| k) Vapour pressure                              | 0.003 mmHg at 20 °C<br>1 mmHg at 105.3 °C |
| l) Vapour density                               | 7.82 - (Air = 1.0)                        |
| m) Relative density                             | 0.773 g/cm <sup>3</sup> at 25 °C          |
| n) Water solubility                             | insoluble                                 |
| o) Partition coefficient: n-octanol/water       | No data available                         |
| p) Auto-ignition temperature                    | No data available                         |
| q) Decomposition temperature                    | No data available                         |
| r) Viscosity                                    | 4.29 mm <sup>2</sup> /s at 20 °C -        |
| s) Explosive properties                         | No data available                         |
| t) Oxidizing properties                         | No data available                         |

### 9.2 Other safety information

Relative vapour density 7.82 - (Air = 1.0)

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - > 5,000 mg/kg(Hexadecane)

(OECD Test Guideline 401)

LD50 Dermal - Rabbit - > 3,160 mg/kg(Hexadecane)

(OECD Test Guideline 402)

TDLo Intraperitoneal - Mouse - 1,546 mg/kg(Hexadecane)

Remarks: Liver:Changes in liver weight.

LDLO Intravenous - Mouse - 9,821 mg/kg(Hexadecane)

Remarks: Behavioral:Altered sleep time (including change in righting reflex).

#### Skin corrosion/irritation

Skin - Rabbit(Hexadecane)

Result: No skin irritation

(OECD Test Guideline 404)

Remarks: Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

#### Serious eye damage/eye irritation

Eyes - Rabbit(Hexadecane)

Result: No eye irritation

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

No data available(Hexadecane)

#### Germ cell mutagenicity

No data available(Hexadecane)

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available(Hexadecane)

#### Specific target organ toxicity - single exposure

No data available(Hexadecane)

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

May be fatal if swallowed and enters airways.(Hexadecane)

#### Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Hexadecane)

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish LC50 - Fish - > 1,028 mg/l - 96 h(Hexadecane)

## 12.2 Persistence and degradability

Biodegradability Result: - Readily biodegradable

## 12.3 Bioaccumulative potential

Bioaccumulation Salmo salar (Atlantic salmon) - 7 d  
- 1700 µg/l(Hexadecane)

Bioconcentration factor (BCF): 5.6

## 12.4 Mobility in soil

No data available(Hexadecane)

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: - IMDG: - IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

### 14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

EUH066 Repeated exposure may cause skin dryness or cracking.  
H304 May be fatal if swallowed and enters airways.

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.