**HEXAMETHYL DISILOXANE**  
CAS NO 107-46-0  

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

1.1 **Product identifiers**  
Product name : Hexamethyl Disiloxane  
CAS-No. : 107-46-0

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 Varadaan House  
New Delhi -110002  
INDIA  
Telephone : +91 11 49404040  
Email : 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  
Flammable liquids (Category 2), H225  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

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

Signal word : Danger  
Hazard statement(s) :  
H225 : Highly flammable liquid and vapour.  
H410 : Very toxic to aquatic life with long lasting effects.  
Precautionary statement(s) :  
P210 : Keep away from heat, hot surfaces, sparks, open flames and other
ignition sources. No smoking.
P273          Avoid release to the environment.
P391          Collect spillage.
P403 + P235   Store in a well-ventilated place. Keep cool.
P501          Dispose of contents/ container to an approved waste disposal plant.
Supplemental Hazard None

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.

SECTION 3: Composition/information on ingredients

3.1 Substances
Synonyms: HMDSO

   Formula: (CH₃)₃SiOSi(CH₃)₃
   Molecular weight: 162.38 g/mol
   CAS-No.: 107-46-0
   EC-No.: 203-492-7

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexamethyldisiloxane</td>
<td>Flam. Liq. 2; Aquatic Acute 1;</td>
<td>&lt;= 100 %</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>Aquatic Chronic 1; H225,</td>
<td></td>
</tr>
<tr>
<td>EC-No.</td>
<td>H400, H410</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M-Factor - Aquatic Acute: 1 -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquatic Chronic: 1</td>
<td></td>
</tr>
</tbody>
</table>

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, silicon oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low 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. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. 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.

Store under inert gas. hygroscopic
Storage class (TRGS 510): Flammable 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
Impervious clothing, Flame retardant antistatic protective clothing,. 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. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) Appearance | Form: liquid  
|   | Colour: colourless |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/ freezing point | Melting point/range: -59 °C - lit. |
| f) Initial boiling point and boiling range | 101 °C - lit. |
| g) Flash point | 0.6 °C - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 21.8 %(V)  
|   | Lower explosion limit: 0.5 %(V) |
| k) Vapour pressure | 44 hPa at 20 °C |
| l) Vapour density | 5.61 - (Air = 1.0) |
| m) Relative density | 0.764 g/mL at 20 °C |
| n) Water solubility | 0.00093 g/l at 23 °C - slightly soluble |
o) Partition coefficient: n-octanol/water  log Pow: > 4 at 25 °C
p) Auto-ignition temperature  340 °C at 1,013 hPa
q) Decomposition temperature
r) Viscosity
s) Explosive properties
r) Oxidizing properties

9.2 Other safety information
Relative vapour density  5.61 - (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
Heat, flames and sparks.

10.5 Incompatible materials
Strong acids, Strong bases, Strong oxidizing agents, Oxygen

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, silicon 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(Hexamethyldisiloxane)
LC50 Inhalation - Rat - 4 h - 15956 ppm(Hexamethyldisiloxane)
(OECD Test Guideline 403)
LD50 Dermal - Rabbit - > 2,000 mg/kg(Hexamethyldisiloxane)
(OECD Test Guideline 402)
NOAEL Oral - Rat - 160 mg/kg(Hexamethyldisiloxane)

Skin corrosion/irritation
Skin - Rabbit(Hexamethyldisiloxane)
Result: No skin irritation
(OECD Test Guideline 404)

Serious eye damage/eye irritation
Eyes - Rabbit(Hexamethyldisiloxane)
Result: No eye irritation
Respiratory or skin sensitisation
No data available (Hexamethyldisiloxane)

Germ cell mutagenicity
Chromosome aberration test in vitro (Hexamethyldisiloxane)
Chinese hamster lung cells
Result: negative
OECD Test Guideline 475 (Hexamethyldisiloxane)
Rat - Bone marrow
Result: negative

Carcinogenicity
No data available (Hexamethyldisiloxane)

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 toxicity to reproduction (Hexamethyldisiloxane)

Specific target organ toxicity - single exposure
No data available (Hexamethyldisiloxane)

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available (Hexamethyldisiloxane)

Additional Information
RTECS: JM9237000

Prolonged or repeated exposure to skin causes defatting and dermatitis., Dizziness, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Hexamethyldisiloxane)

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - ca. 0.46 mg/l - 96 h (Hexamethyldisiloxane)
Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 0.22 mg/l - 95 h (Hexamethyldisiloxane) (OECD Test Guideline 201)

12.2 Persistence and degradability
Biodegradability aerobic - Exposure time 28 d (Hexamethyldisiloxane) Result: 2 % - Not biodegradable (OECD Test Guideline 301C)

12.3 Bioaccumulative potential
No data available
Bioaccumulation Cyprinus carpio (Carp) - 70 d at 25 °C (Hexamethyldisiloxane)
Bioconcentration factor (BCF): 1,100 - 2,400 (OECD Test Guideline 305C)

12.4 Mobility in soil
No data available (Hexamethyldisiloxane)
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**
Very toxic to aquatic life with long lasting effects.
No data available

**SECTION 13: Disposal considerations**

13.1 **Waste treatment methods**

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable.
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: 1993  
IMDG: 1993  
IATA: 1993

14.2 **UN proper shipping name**
ADR/RID: FLAMMABLE LIQUID, N.O.S. (Hexamethydisiloxane)  
IMDG: FLAMMABLE LIQUID, N.O.S. (Hexamethydisiloxane)  
IATA: Flammable liquid, n.o.s. (Hexamethydisiloxane)

14.3 **Transport hazard class(es)**
ADR/RID: 3  
IMDG: 3  
IATA: 3

14.4 **Packaging group**
ADR/RID: II  
IMDG: II  
IATA: II

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.**
H225 Highly flammable liquid and vapour.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

**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 for additional terms and conditions of sale.