TRI-N-OCTYLPHOSPHINE OXIDE AR MSDS

CAS No: 78-50-2 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form: Substance
CAS No: 78-50-2
Product code: 06368
Chemical structure:

\[
\text{CH}_3\text{CH}_2\text{CH}_2\text{OP}\text{CH}_2\text{CH}_3\text{CH}_3\text{CH}_3\text{CH}_3\text{CH}_3
\]

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

1.2.1. Relevant identified uses

Use of the substance/mixture: Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT. LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number: + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

- Serious eye damage/eye irritation, Category 1 H318
- Skin corrosion/irritation, Category 2 H315

Full text of classification categories and H statements: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R41
Xi; R38

Full text of R-phrases: see section 16
Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

GHS05

Signal word (CLP): Danger

Hazard statements (CLP):

H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (CLP):

P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name: TRI-n-OCTYLPHOSPHINE OXIDE AR
CAS No: 78-50-2

Full text of R- and H-phrases: see section 16

3.2. Mixture
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion: Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Symptoms/injuries after skin contact: Causes skin irritation.
<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td>Indication of any immediate medical attention and special treatment needed</td>
<td>Treat symptomatically.</td>
</tr>
<tr>
<td>5.1</td>
<td>Extinguishing media</td>
<td>Suitable extinguishing media: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2). Unsuitable extinguishing media: Do not use a heavy water stream.</td>
</tr>
<tr>
<td>5.2</td>
<td>Special hazards arising from the substance or mixture</td>
<td>No additional information available</td>
</tr>
<tr>
<td>5.3</td>
<td>Advice for firefighters</td>
<td>Protection during firefighting: Do not attempt to take action without suitable protective equipment.</td>
</tr>
<tr>
<td>6.1.2</td>
<td>For emergency responders</td>
<td>Protective equipment: Use personal protective equipment as required. Emergency procedures: Stop release.</td>
</tr>
<tr>
<td>6.2</td>
<td>Environmental precautions</td>
<td>Avoid release to the environment.</td>
</tr>
<tr>
<td>6.3</td>
<td>Methods and material for containment and cleaning up</td>
<td>Methods for cleaning up: Clear up rapidly by scoop or vacuum.</td>
</tr>
<tr>
<td>6.4</td>
<td>Reference to other sections</td>
<td>No additional information available</td>
</tr>
<tr>
<td>7.1</td>
<td>Precautions for safe handling</td>
<td>Precautions for safe handling: Do not get in eyes, on skin, or on clothing. Hygiene measures: Wash ... thoroughly after handling.</td>
</tr>
<tr>
<td>7.2</td>
<td>Conditions for safe storage, including any incompatibilities</td>
<td>Storage conditions: Store in original container. Keep container tightly closed. Store in a dry place. Protect from moisture.</td>
</tr>
<tr>
<td>7.3</td>
<td>Specific end use(s)</td>
<td>No additional information available</td>
</tr>
<tr>
<td>8.1</td>
<td>Control parameters</td>
<td>No additional information available</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Hand protection : protective gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Molecular mass : 386.64 g/mol
Colour : White crystalline.
Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : 50 - 52
Freezing point : No data available
Boiling point : 201 - 202
Flash point : 110 °C
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available
10.2. **Chemical stability**
Stable under normal conditions.

10.3. **Possibility of hazardous reactions**
No additional information available

10.4. **Conditions to avoid**
Direct sunlight. Air contact. Moisture.

10.5. **Incompatible materials**
No additional information available

10.6. **Hazardous decomposition products**
No additional information available

### SECTION 11: Toxicological information

11.1. **Information on toxicological effects**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information

12.1. **Toxicity**
No additional information available

12.2. **Persistence and degradability**
No additional information available

12.3. **Bioaccumulative potential**
No additional information available
12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
No additional information available

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name
Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)
ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group
Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user
- Overland transport
  No data available
- Transport by sea
  No data available
- Air transport
  No data available
- Inland waterway transport
  No data available
- Rail transport
  No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
No REACH Annex XVII restrictions
TRI-n-OCTYLPHOSPHINE OXIDE AR is not on the REACH Candidate List
TRI-n-OCTYLPHOSPHINE OXIDE AR is not on the REACH Annex XIV List

15.1.2. National regulations

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Denmark
Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product
15.2. Chemical safety assessment
No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>R38</td>
<td>Irritating to skin</td>
</tr>
<tr>
<td>R41</td>
<td>Risk of serious damage to eyes</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.