PHENYL CHLOROFORMATE FOR SYNTHESIS MSDS

CAS No: 1885-14-9 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
EC no: 217-547-8
CAS No: 1885-14-9
Product code: 5206D
Formula: C7H5ClO2
Chemical structure:

Synonyms: Chloroformic acid phenyl ester

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]
Acute toxicity (inhal.), Category 2: H330
Skin corrosion/irritation, Category 1B: H314
Acute toxicity (oral), Category 4: H302

Full text of classification categories and H statements: see section 16
Classification according to Directive 67/548/EEC or 1999/45/EC
T+; R26
Xn; R22
C; R34
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):
GHS06  GHS05
Signal word (CLP): Danger
Hazard statements (CLP):
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H330 - Fatal if inhaled
Precautionary statements (CLP):
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P284 - [In case of inadequate ventilation] wear respiratory 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
P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients
3.1. Substance
Name: PHENYL CHLOROFORMATE FOR SYNTHESIS
CAS No: 1885-14-9
EC no: 217-547-8

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 victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

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. Call a POISON CENTER or doctor/physician if you feel unwell. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries: Causes severe skin burns and eye damage.

Symptoms/injuries after ingestion: Swallowing a small quantity of this material will result in serious health hazard.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

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

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Use personal protective equipment as required.

Emergency procedures: Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Clean up immediately by sweeping or vacuum.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.
# PHENYL CHLOROFORMATE FOR SYNTHESIS
## Safety Data Sheet

### Storage conditions
Store in original container. Store in a dry place.

### 7.3. Specific end use(s)
No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters
No additional information available

#### 8.2. Exposure controls

<table>
<thead>
<tr>
<th>Protection</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection</td>
<td>protective gloves</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Chemical goggles or face shield</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Wear suitable protective clothing</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Wear respiratory protection</td>
</tr>
</tbody>
</table>

### SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Clear Colorless</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>-25 °C</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>74 - 75</td>
</tr>
<tr>
<td>Flash point</td>
<td>69 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt; 500 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>0.89 hPa at 20 °C</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>5.4</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.248 g/cm³</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>1.954</td>
</tr>
</tbody>
</table>
PHENYL CHLOROFORMATE FOR SYNTHESIS
Safety Data Sheet

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
Thermal decomposition generates: Corrosive vapours.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation : Causes severe skin burns and eye damage.
Serious eye damage/irritation : Serious eye damage, category 1, implicit
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified
Potential adverse human health effects and symptoms: Harmful if swallowed.

**SECTION 12: Ecological information**

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>PHENYL CHLOROFORMATE FOR SYNTHESIS (1885-14-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
</tr>
<tr>
<td>1.954</td>
</tr>
</tbody>
</table>

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
Product/Packaging disposal recommendations: Dispose of contents/container to ...

**SECTION 14: Transport information**

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

14.1. UN number

| UN-No. (ADR) | 2746 |
| UN-No. (IMDG) | 2746 |
| UN-No.(IATA) | 2746 |
| UN-No.(ADN) | 2746 |
| UN-No. (RID) | 2746 |

14.2. UN proper shipping name

| Proper Shipping Name (ADR) | PHENYL CHLOROFORMATE |
| Proper Shipping Name (IMDG) | PHENYL CHLOROFORMATE |
| Proper Shipping Name (IATA) | PHENYL CHLOROFORMATE |
| Proper Shipping Name (ADN) | PHENYL CHLOROFORMATE |
| Proper Shipping Name (RID) | PHENYL CHLOROFORMATE |
| Transport document description (ADR) | UN 2746 PHENYL CHLOROFORMATE, 6.1 (8), II, (D/E) |
| Transport document description (IMDG) | UN 2746 PHENYL CHLOROFORMATE, 6.1 (8), II |
## Transport document description (IATA)

UN 2746 PHENYL CHLOROFORMATE, 6.1, II

## Transport document description (ADN)

UN 2746 PHENYL CHLOROFORMATE, 6.1 (8), II

## Transport document description (RID)

UN 2746 PHENYL CHLOROFORMATE, 6.1 (8), II

### 14.3. Transport hazard class(es)

#### ADR

- **Transport hazard class(es) (ADR)**: 6.1 (8)
- **Danger labels (ADR)**: 6.1, 8

#### IMDG

- **Transport hazard class(es) (IMDG)**: 6.1 (8)
- **Danger labels (IMDG)**: 6.1, 8

#### IATA

- **Transport hazard class(es) (IATA)**: 6.1 (8)
- **Danger labels (IATA)**: 6.1, 8

#### ADN

- **Transport hazard class(es) (ADN)**: 6.1 (8)
- **Danger labels (ADN)**: 6.1, 8

#### RID

- **Transport hazard class(es) (RID)**: 6.1 (8)
- **Danger labels (RID)**: 6.1, 8

### 14.4. Packing group

- **Packing group (ADR)**: II
- **Packing group (IMDG)**: II
PHENYL CHLOROFORMATE FOR SYNTHESIS
Safety Data Sheet

Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

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
Classification code (ADR) : TC1
Limited quantities (ADR) : 100ml
Excepted quantities (ADR) : E4
Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP2
Tank code (ADR) : L4BH
Tank special provisions (ADR) : TU15, TE19
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
Special provisions for carriage - Operation (ADR) : S9, S19
Hazard identification number (Kemler No.) : 68
Orange plates :

Tunnel restriction code (ADR) : D/E
EAC code : 2X

- Transport by sea
Limited quantities (IMDG) : 100 ml
Excepted quantities (IMDG) : E4
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2, TP13
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW1, SW2, H1, H2
MFAG-No : 156

- Air transport
PCA Excepted quantities (IATA) : E4
PCA Limited quantities (IATA) : Y641
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 653
PHENYL CHLOROFORMATE FOR SYNTHESIS
Safety Data Sheet

PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 660
CAO max net quantity (IATA) : 30L
ERG code (IATA) : 6C

- Inland waterway transport
Classification code (ADN) : TC1
Special provisions (ADN) : 802
Limited quantities (ADN) : 100 ml
Excepted quantities (ADN) : E4
Equipment required (ADN) : PP, EP, TOX, A
Ventilation (ADN) : VE02
Number of blue cones/lights (ADN) : 2

- Rail transport
Classification code (RID) : TC1
Limited quantities (RID) : 100ml
Excepted quantities (RID) : E4
Packing instructions (RID) : P001, IBC02
Portable tank and bulk container special provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T7
Tank codes for RID tanks (RID) : L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage – Loading and unloading (RID) : CW13, CW28, CW31
Colis express (express parcels) (RID) : CE5
Hazard identification number (RID) : 68

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
PHENYL CHLOROFORMATE FOR SYNTHESIS is not on the REACH Candidate List
PHENYL CHLOROFORMATE FOR SYNTHESIS 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)
PHENYL CHLOROFORMATE FOR SYNTHESIS
Safety Data Sheet

Denmark
Class for fire hazard : Class III-1
Store unit : 50 liter
Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
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:

<table>
<thead>
<tr>
<th>R-Phrase</th>
<th>H-Phrase</th>
<th>EUH-Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2 (Inhalation)</td>
<td>Acute toxicity (inhal.), Category 2</td>
<td></td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
<td></td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation, Category 1B</td>
<td></td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
<td></td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
<td></td>
</tr>
<tr>
<td>H330</td>
<td>Fatal if inhaled</td>
<td></td>
</tr>
<tr>
<td>R22</td>
<td>Harmful if swallowed</td>
<td></td>
</tr>
<tr>
<td>R26</td>
<td>Very toxic by inhalation</td>
<td></td>
</tr>
<tr>
<td>R34</td>
<td>Causes burns</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Corrosive</td>
<td></td>
</tr>
<tr>
<td>T+</td>
<td>Very toxic</td>
<td></td>
</tr>
<tr>
<td>Xn</td>
<td>Harmful</td>
<td></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.