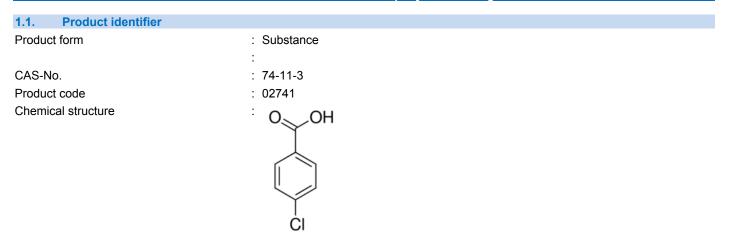
4-CHLOROBENZOIC ACID FOR SYNTHESIS MSDS



CAS-No.: 74-11-3 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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



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

1.2.1. Relevant identified uses

Industrial/Professional use spec

: Industrial For professional use only

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 (oral), | H302 |
| Category 4 Serious eye damage/eye | H319 |
| irritation, Category 2 | |
| Skin corrosion/irritation, | H315 |
| Category 2 Specific target organ | H335 |
| toxicity — Single | 1000 |
| exposure, Category 3, | |

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Respiratory tract irritation

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Xn; R22 Xi; R36/37/38 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

| 2.2. Label elements | |
|--|--|
| Z.Z. Laber elements | |
| Labelling according to Regulation (EC) | lo. 1272/2008 [CLP] |
| Hazard pictograms (CLP) | GHS07 |
| Signal word (CLP) | : Warning |
| Hazard statements (CLP) | H302 - Harmful if swallowed. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. |
| Precautionary statements (CLP) | : P261 - Avoid breathing vapours, dust, fume, gas. 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

| SECTIO | SECTION 3: Composition/information on ingredients | | | |
|--------|---|--------------------------------------|--|--|
| 3.1. | Substances | | | |
| Name | | : 4-CHLOROBENZOIC ACID For Synthesis | | |
| CAS-No |). | : 74-11-3 | | |
| | | | | |

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

3.2. Mixtures

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. Call a POISON CENTER/doctor if you feel unwell. |
| First-aid | measures after skin contact | : Wash with plenty of water/ Wash contaminated clothing before reuse. 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. Get medical advice/attention. |
| First-aid | measures after ingestion | : Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. |
| 4.2. | Most important symptoms and ef | fects, both acute and delayed |
| Symptor | ns/effects after inhalation | : May cause respiratory irritation. |
| Symptor | ns/effects after skin contact | : Causes skin irritation. |
| Symptor | ns/effects after eye contact | : Causes serious eye irritation. |
| Symptor | ns/effects after ingestion | : Harmful if swallowed. |
| 4.3. | Indication of any immediate medi | cal attention and special treatment needed |
| Treat sy | mptomatically. | |
| SECTIO | N 5: Firefighting measures | |
| 5.1. | Extinguishing modia | |
| | Extinguishing media extinguishing media | : Carbon dioxide. Dry powder. Foam. Water spray. |
| | ble extinguishing media | : Do not use a heavy water stream. |
| Unsular | | . Do not use a neavy water stream. |
| 5.2. | Special hazards arising from the | substance or mixture |
| No addit | ional information available | |
| 5.3. | Advice for firefighters | |
| Protectio | on during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
| SECTIO | N 6: Accidental release measures | |
| 6.1. | Personal precautions, protective | equipment and emergency procedures |
| 6.1.1. | For non-emergency personnel | |
| | | : Evacuate unnecessary personnel. |
| Emerger | | |
| 6.1.2. | For emergency responders | |
| Protectiv | re equipment | Equip cleanup crew with proper protection. |
| 6.2. | Environmental precautions | |
| Avoid re | lease to the environment. | |
| | | |
| 6.3. | Methods and material for contain | |
| Methods | for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers. |
| 6.4. | Reference to other sections | |
| No addit | ional information available | |
| SECTIO | N 7: Handling and storage | |
| 7.1. | Precautions for safe handling | |
| | | : Avoid contact with skin and eyes. Use only outdoors or in a well-ventilated area. Do |
| | - | not breathe vapours. |
| Hygiene | measures | : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

| 7.2. Conditions for safe storage, including any incompatibilities | | |
|---|--|--|
| Storage conditions | : Keep container tightly closed. Store in a well-ventilated 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 | | |
| Hand protection | : Protective gloves | |
| Eye protection Skin and body protection | Chemical goggles or safety glassesWear suitable protective clothing | |
| Respiratory protection | : [In case of inadequate ventilation] wear respiratory protection. | |
| SECTION 9: Physical and chemical prop | | |
| 9.1. Information on basic physical a | | |
| Physical state | : Solid | |
| Molecular mass | : 156.57 g/mol | |
| Colour | : Pale yellow to white. | |
| Odour | : faint odour. | |
| Odour threshold | : No data available | |
| рН | : No data available | |
| Relative evaporation rate (butylacetate=1) | : No data available | |
| Melting point | : 238 - 241 °C | |
| Freezing point | : No data available | |
| Boiling point | : No data available | |
| Flash point | : 238 °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 additi | ional information available |
| SECTIO | N 10: Stability and reactivity |
| | |
| 10.1. | Reactivity |
| No additi | ional information available |
| 10.2. | Chemical stability |
| Stable ur | nder normal conditions. |
| 10.3. | Possibility of hazardous reactions |
| No additi | ional information available |
| 10.4. | Conditions to avoid |
| Air conta | ct. Direct sunlight. Moisture. |
| 10.5. | Incompatible materials |
| No additi | ional information available |
| 10.6. | Hazardous decomposition products |
| No additi | ional information available |

| SECTION 11: Toxicological information | tion |
|---------------------------------------|-------------------------------------|
| | |
| 11.1. Information on toxicologica | al effects |
| Acute toxicity | : Oral: Harmful if swallowed. |
| | |
| | |
| Skin corrosion/irritation | : Causes skin irritation. |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| | |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : May cause respiratory irritation. |
| | |
| STOT-repeated exposure | : Not classified |
| | |

Aspiration hazard : Not classified

| Potential adverse human health effects : Harmful if swallowed. and symptoms | | |
|--|---|--|
| 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 assessi | nent | |
| 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 hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. | |
| 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 | |
| | : Not applicable | |
| Proper Shipping Name (IATA) | Not applicable | |
| -F FF J () | : Not applicable : Not applicable | |
| 14.3. Transport hazard class(es) | | |
| ADR | | |
| Transport hazard class(es) (ADR) | : Not applicable | |

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| 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

4-CHLOROBENZOIC ACID For Synthesis is not on the REACH Candidate List

4-CHLOROBENZOIC ACID For Synthesis is not on the REACH Annex XIV List

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15.1.2. National regulations

Germany

| Reference to AwSV | : | Water hazard class (WGK) 2, significant hazard to water (Classification according to AwSV; ID No. 226) |
|---|---|--|
| 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV | : | Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) |
| Netherlands | | |
| SZW-lijst van kankerverwekkende stoffen | : | The substance is not listed |
| SZW-lijst van mutagene stoffen | : | The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding | : | The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid | : | The substance is not listed |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling | : | The substance is not listed |
| 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-statements:

| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 | |
|---------------------|---|--|
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 | |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 | |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | |
| H302 | Harmful if swallowed. | |
| H315 | Causes skin irritation. | |
| H319 | Causes serious eye irritation. May cause respiratory irritation. Harmful if swallowed | |
| H335 | | |
| R22 | | |
| R36/37/38 | Irritating to eyes, respiratory system and skin | |
| Xi | Irritant | |
| Xn | Harmful | |

4-CHLOROBENZOIC ACID For Synthesis

Safety Data Sheet

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