

PHENYL ISOTHIOCYANATE FOR SYNTHESIS MSDS

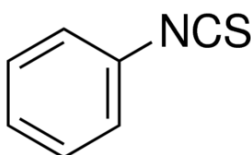
CAS-No.: 103-72-0 MSDS

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. : 103-72-0
Product code : 05223
Chemical structure :



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), H301
Category 3
Skin corrosion/irritation, H314
Category 1
Respiratory sensitisation, H334
Category 1
Skin sensitisation, H317
Category 1

Full text of H statements : see section 16

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Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

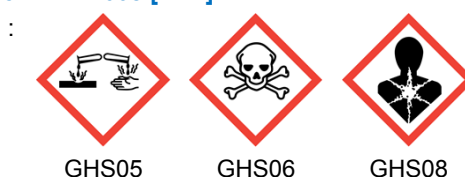
Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H301 - Toxic if swallowed.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements (CLP)

: P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor
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/doctor

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : PHENYL ISOTHIOCYNATE For Synthesis
CAS-No. : 103-72-0

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. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

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|---------------------------------------|--|
| 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 | : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. |
| 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/effects | : Causes severe skin burns and eye damage. |
| Symptoms/effects after inhalation | : May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. |
| Symptoms/effects after ingestion | : Toxic if swallowed. |

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 (CO ₂). |
| Unsuitable extinguishing media | : Do not use extinguishing media containing water. |

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 | : Avoid contact with skin, eyes and clothing. |
|----------------------|---|

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. Clean contaminated surfaces with an excess of water. |
|-------------------------|--|

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 | : Avoid contact with skin and eyes. |
| Hygiene measures | : 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 | : Store in original container. Store in a dry place. Keep in fireproof place. |
|--------------------|---|

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

| | |
|--------------------------|--------------------------------------|
| Hand protection | : Protective gloves |
| Eye protection | : Chemical goggles or safety glasses |
| Skin and body protection | : Chemical resistant safety shoes |
| Respiratory protection | : Wear respiratory protection. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|------------------------------|
| Physical state | : Liquid |
| Molecular mass | : 135.18 g/mol |
| Colour | : Clear colorless to yellow. |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : -21 °C |
| Boiling point | : 218 K |
| Flash point | : 88 °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 |
| Density | : 1.132 g/cm³ |
| Solubility | : No data available |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |

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| | |
|----------------------|---------------------|
| 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. High temperature. Overheating.

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

Acute toxicity : Oral: Toxic if swallowed.

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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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) | : 2927 |
| UN-No. (IMDG) | : 2927 |
| UN-No. (IATA) | : 2927 |
| UN-No. (ADN) | : 2927 |
| UN-No. (RID) | : 2927 |

14.2. UN proper shipping name

| | |
|---------------------------------------|--|
| Proper Shipping Name (ADR) | : TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. |
| Proper Shipping Name (IMDG) | : TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. |
| Proper Shipping Name (IATA) | : Toxic liquid, corrosive, organic, n.o.s. |
| Proper Shipping Name (ADN) | : TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. |
| Proper Shipping Name (RID) | : TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. |
| Transport document description (ADR) | : UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S., 6.1 (8), II, (D/E) |
| Transport document description (IMDG) | : UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S., 6.1 (8), II |
| Transport document description (IATA) | : UN 2927 Toxic liquid, corrosive, organic, n.o.s., 6.1, II |
| Transport document description (ADN) | : UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S., 6.1 (8), II |
| Transport document description (RID) | : UN 2927 TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S., 6.1 (8), II |

14.3. Transport hazard class(es)

ADR

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

14.5. Environmental hazards

Dangerous for the environment : No

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| | |
|-------------------|--|
| Marine pollutant | : No |
| Other information | : No supplementary information available |

14.6. Special precautions for user

- Overland transport

| | |
|---|---------------|
| Classification code (ADR) | : TC1 |
| Special provisions (ADR) | : 274 |
| 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) | : T11 |
| Portable tank and bulk container special provisions (ADR) | : TP2, TP27 |
| 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 | : 2XE |
| APP code | : B |

- Transport by sea

| | |
|------------------------------------|--|
| Special provisions (IMDG) | : 274 |
| Packing instructions (IMDG) | : P001 |
| IBC packing instructions (IMDG) | : IBC02 |
| Tank instructions (IMDG) | : T11 |
| Tank special provisions (IMDG) | : TP2, TP27 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-B |
| Stowage category (IMDG) | : B |
| Stowage and handling (IMDG) | : SW2 |
| Properties and observations (IMDG) | : Toxic if swallowed, by skin contact or by inhalation. Causes burns to skin, eyes and mucous membranes. |

- Air transport

| | |
|--|------------|
| PCA Excepted quantities (IATA) | : E4 |
| PCA Limited quantities (IATA) | : Y640 |
| PCA limited quantity max net quantity (IATA) | : 0.5L |
| PCA packing instructions (IATA) | : 653 |
| PCA max net quantity (IATA) | : 1L |
| CAO packing instructions (IATA) | : 660 |
| CAO max net quantity (IATA) | : 30L |
| Special provisions (IATA) | : A4, A137 |

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ERG code (IATA) : 6C

- Inland waterway transport

Classification code (ADN) : TC1
Special provisions (ADN) : 274, 802
Limited quantities (ADN) : 100 ml
Excepted quantities (ADN) : E4
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP, TOX, A
Ventilation (ADN) : VE02
Number of blue cones/lights (ADN) : 2

- Rail transport

Classification code (RID) : TC1
Special provisions (RID) : 274
Excepted quantities (RID) : E4
Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T11
Portable tank and bulk container special provisions (RID) : TP2, TP27
Tank codes for RID tanks (RID) : L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
Special provisions for carriage - Loading, unloading and handling (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 ISOTHIOCYNATE For Synthesis is not on the REACH Candidate List

PHENYL ISOTHIOCYNATE 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)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

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| | |
|---|-------------------------------|
| 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

| | |
|-----------------------------------|--|
| 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-statements:

| | |
|---------------------|--|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Resp. Sens. 1 | Respiratory sensitisation, Category 1 |
| Skin Corr. 1 | Skin corrosion/irritation, Category 1 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| H301 | Toxic if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |

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