

CAS-No.: 64-86-8 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 Index-No. | : 614-005-00-6 |
| EC-No. | : 200-598-5 |
| CAS-No. | : 64-86-8 |
| Product code | : 02910 |
| Chemical structure | : H ₃ CO H ₃ CO H ₃ CO OCH ₃ OCH 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]

Acute toxicity (oral), H300 Category 1 Acute toxicity (inhal.), H330 Category 1 Serious eye damage/eye H318 irritation, Category 1 Germ cell mutagenicity, H340 Category 1B

Full text of H statements : see section 16

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

Muta.Cat.2; R46 T+; R28 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects No additional information available



2.3. Other hazards

No additional information available

| SECTION 3: Composition/information on ingredients | |
|---|-------------------------|
| 3.1. Substances | |
| Name | : COLCHICINE Extra Pure |
| CAS-No. | : 64-86-8 |
| EC-No. | : 200-598-5 |
| EC Index-No. | : 614-005-00-6 |

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

3.2. Mixtures

Not applicable

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SECTION 4: First aid measures

| 4.1. Description of first aid measure | S |
|--|--|
| First-aid measures after inhalation | : Assure fresh air breathing. Allow the victim to rest. |
| First-aid measures after skin contact | : Wash with plenty of water/ Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get immediate 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. Immediately call a POISON CENTER/doctor. |
| 4.2. Most important symptoms and e | effects, both acute and delayed |
| Symptoms/effects | : May cause genetic defects. |
| Symptoms/effects after eye contact | : Causes serious eye damage. |
| Symptoms/effects after ingestion | : Fatal if swallowed. |
| 4.3. Indication of any immediate med | dical 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 | e substance or mixture |
| No additional information available | |
| 5.3. Advice for firefighters | |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |
| SECTION 6: Accidental release measure | S |
| 6.1. Personal precautions, protective | e 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 | : Ventilate area. |
| 6.2. Environmental precautions | |
| Avoid release to the environment. | |
| 6.3. Methods and material for contai | nment and cleaning up |
| 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 additional information available | |
| SECTION 7: Handling and storage | |
| | |
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Obtain special instructions before use. Do not breathe vapours. Avoid contact with |
| Hygiene measures | skin and eyes. : Do not eat, drink or smoke when using this product. Wash hands and other exposed |

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| 7.2. | Conditions for safe storage, inclu | iding any incompatibilities |
|--|------------------------------------|--|
| Storage | e conditions | : Store in a well-ventilated place. Keep container tightly closed. |
| 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 | : Chemical goggles or safety glasses | |
| Skin and body protection | : Wear suitable protective clothing | |
| Respiratory protection | : [In case of inadequate ventilation] wear respiratory protection. | |
| SECTION 9: Physical and chemical prop | SECTION 9: Physical and chemical properties | |
| 9.1. Information on basic physical and chemical properties | | |
| Physical state | : Solid | |
| Molecular mass | : 399.44 g/mol | |
| Colour | : White powder. | |
| Odour | : No data available | |
| Odour threshold | : No data available | |
| рН | : 6 | |
| Relative evaporation rate (butylacetate=1) | : No data available | |
| Melting point | : 150 - 160 °C | |
| Freezing point | : No data available | |
| Boiling point | : No data available | |
| Flash point | : No data available | |
| 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 | : Water: Soluble | |

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| 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

Air contact. Direct sunlight.

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: Fatal if swallowed. Inhalation: Fatal if inhaled. |
| Skin corrosion/irritation | : Not classified pH: 6 |
| Serious eye damage/irritation | : Causes serious eye damage. pH: 6 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : May cause genetic defects. |
| 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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| Potential adverse human health effects and symptoms | s : Fatal if swallowed. |
|---|---|
| SECTION 12: Ecological information | |
| 12.1. Toxicity | |
| No additional information available | |
| | |
| | |
| | |
| 12.2. Persistence and degradabili | ity |
| No additional information available | |
| | |
| 12.3. Bioaccumulative potential | |
| No additional information available | |
| | |
| 12.4. Mobility in soil | |
| No additional information available | |
| 49.5 Describe of DDT and vDvD as | |
| 12.5. Results of PBT and vPvB as No additional information available | sessment |
| | |
| | |
| 12.6. Other adverse effects | |
| No additional information available | |
| SECTION 13: Disposal consideratior | ns |
| 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. |
| Ecology - waste materials | : Hazardous waste due to toxicity. |
| SECTION 14: Transport information | |
| In accordance with ADR / RID / IMDG / | |
| In accordance with ADK / KID / IMDG / | |
| 14.1. UN number | |
| UN-No. (ADR) | : 1544 |
| | |

| , | |
|-------------------------------|---------------------------------|
| UN-No. (IMDG) | : 1544 |
| UN-No. (IATA) | : 1544 |
| UN-No. (ADN) | : 1544 |
| UN-No. (RID) | : 1544 |
| | |
| 14.2. UN proper shipping name | |
| Proper Shipping Name (ADR) | : ALKALOIDS, SOLID, N.O.S. |
| Proper Shipping Name (IMDG) | : ALKALOIDS, SOLID, N.O.S. |
| Proper Shipping Name (IATA) | : Alkaloid salts, solid, n.o.s. |
| Proper Shipping Name (ADN) | : ALKALOIDS, SOLID, N.O.S. |
| Proper Shipping Name (RID) | : ALKALOIDS, SOLID, N.O.S. |
| | |

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| Transport document description (ADR) | : UN 1544 ALKALOIDS, SOLID, N.O.S., 6.1, I, (C/E) |
|---------------------------------------|---|
| Transport document description (IMDG) | : UN 1544 ALKALOIDS, SOLID, N.O.S., 6.1, I |
| Transport document description (IATA) | : UN 1544 Alkaloid salts, solid, n.o.s., 6.1, I |
| Transport document description (ADN) | : UN 1544 ALKALOIDS, SOLID, N.O.S., 6.1, I |
| Transport document description (RID) | : UN 1544 ALKALOIDS, SOLID, N.O.S., 6.1, I |
| | |

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) Danger labels (ADR)



: 6.1

: 6.1

: 6.1

IMDG

Transport hazard class(es) (IMDG) Danger labels (IMDG)

ΙΑΤΑ

Transport hazard class(es) (IATA) Hazard labels (IATA)



ADN

Transport hazard class(es) (ADN) Danger labels (ADN)



: 6.1

: 6.1

: 6.1

: 6.1

RID

Transport hazard class(es) (RID) Danger labels (RID)



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| 14.4. Packing group | |
|-------------------------------|--|
| Packing group (ADR) | :1 |
| Packing group (IMDG) | :1 |
| Packing group (IATA) | :1 |
| Packing group (ADN) | :1 |
| Packing group (RID) | :1 |
| | |
| 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) | : T2 |
| Special provisions (ADR) | : 43, 274 |
| Limited quantities (ADR) | : 0 |
| Excepted quantities (ADR) | : E5 |
| Packing instructions (ADR) | : P002, IBC07 |
| Mixed packing provisions (ADR) | : MP18 |
| Portable tank and bulk container instructions (ADR) | : T6 |
| Portable tank and bulk container special provisions (ADR) | : TP33 |
| Tank code (ADR) | : S10AH |
| Tank special provisions (ADR) | : TU15, TE19 |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 1 |
| Special provisions for carriage - Packages (ADR) | : V10 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV1, CV13, CV28 |
| | |
| Special provisions for carriage - Operation (ADR) | : S9, S14 |
| Special provisions for carriage - Operation | : S9, S14 : 66 |
| Special provisions for carriage - Operation (ADR) | , - |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) | : 66 : 66 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates | 66 66 1544 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) | : 66 66 1544 : C/E |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code | : 66 66 1544 : C/E |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea | : 66 66 1544 : C/E : 2X |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea Special provisions (IMDG) | : 66 : 66 1544 : C/E : 2X : 43, 274 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea Special provisions (IMDG) Packing instructions (IMDG) | : 66 : 66 1544 : C/E : 2X : 43, 274 : P002 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea Special provisions (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) | : 66 : 66 1544 : C/E : 2X : 43, 274 : P002 : IBC07 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea Special provisions (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) | : 66 66 1544 : C/E : 2X : 43, 274 : P002 : IBC07 : B1 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea Special provisions (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) Tank instructions (IMDG) | : 66 : 66 : 1544 : C/E : 2X : 43, 274 : P002 : IBC07 : B1 : T6 |
| Special provisions for carriage - Operation (ADR) Hazard identification number (Kemler No.) Orange plates Tunnel restriction code (ADR) EAC code - Transport by sea Special provisions (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) IBC special provisions (IMDG) IBC special provisions (IMDG) Tank instructions (IMDG) | : 66 : 66 : 1544 : C/E : 2X : 43, 274 : P002 : IBC07 : B1 : T6 : TP33 |

Stowage category (IMDG)

: A

: A wide range of toxic solids, generally of vegetable origin. Toxic if swallowed, by skin contact or by inhalation.

Properties and observations (IMDG)

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| MFAG-No | : 151 |
|---|--------------------|
| - Air transport | |
| PCA Excepted quantities (IATA) | : E5 |
| PCA Limited quantities (IATA) | : Forbidden |
| PCA limited quantity max net quantity (IATA) | : Forbidden |
| PCA packing instructions (IATA) | : 666 |
| PCA max net quantity (IATA) | : 5kg |
| CAO packing instructions (IATA) | : 673 |
| CAO max net quantity (IATA) | : 50kg |
| Special provisions (IATA) | : A3, A4, A6, A801 |
| ERG code (IATA) | : 6L |
| - Inland waterway transport | |
| Classification code (ADN) | : T2 |
| Special provisions (ADN) | : 43, 274, 802 |
| Limited quantities (ADN) | : 0 |
| Excepted quantities (ADN) | : E5 |
| Equipment required (ADN) | : PP, EP |
| Number of blue cones/lights (ADN) | : 2 |
| - Rail transport | |
| Classification code (RID) | : T2 |
| Special provisions (RID) | : 43, 274 |
| Limited quantities (RID) | : 0 |
| Excepted quantities (RID) | : E5 |
| Packing instructions (RID) | : P002, IBC07 |
| Mixed packing provisions (RID) | : MP18 |
| Portable tank and bulk container instructions (RID) | : T6 |
| Portable tank and bulk container special provisions (RID) | : TP33 |
| Tank codes for RID tanks (RID) | : S10AH |
| Special provisions for RID tanks (RID) | : TU15 |
| Transport category (RID) | : 1 |
| Special provisions for carriage – Packages (RID) | : W10 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : CW13, CW28, CW31 |
| Hazard identification number (RID) | : 66 |
| | |

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 COLCHICINE Extra Pure is not on the REACH Candidate List COLCHICINE Extra Pure is not on the REACH Annex XIV List Safety Data Sheet

15.1.2. National regulations

Germany

| Connuny | | |
|---|---|--|
| Reference to AwSV | : | Water hazard class (WGK) 3, severe hazard to water (Classification according to AwSV; ID No. 888) |
| 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 |
| SZW-lijst van mutagene stoffen | : | COLCHICINE Extra Pure is 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 Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal |
| | | |

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

| Acute Tox. 1 (Inhalation) | Acute toxicity (inhal.), Category 1 |
|---------------------------|---|
| Acute Tox. 1 (Oral) | Acute toxicity (oral), Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Muta. 1B | Germ cell mutagenicity, Category 1B |
| H300 | Fatal if swallowed. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H340 | May cause genetic defects. |
| R28 | Very toxic if swallowed |
| R46 | May cause heritable genetic damage |
| T+ | Very toxic |

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