CADMIUM SULPHATE HYDRATE EXTRA PURE MSDS



CAS No: 7790-84-3 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

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

| 1.1. | Product identifier | | |
|---------|--------------------|---|-----------|
| Product | form | : | Substance |
| | | : | |
| CAS No |) | : | 7790-84-3 |
| Product | code | : | 02426 |

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

SPAN LAB UNIT NO. 14,SKY INDUSTRIAL ESTATE,WALIV, VASAI (E) 401208 Mumbai - INDIA PH: +91 9820509929 info@spanlab.in www.spanlab.in

SECTION 2: Hazards identification

| 2.1. Classification of | the substance or mixture |
|---|--|
| Classification according | to Regulation (EC) No. 1272/2008 [CLP] |
| Acute toxicity (oral), Category 3 | H301 |
| Acute toxicity (inhal.), Category 2 | H330 |
| Germ cell mutagenicity, Category 1A | H340 |
| Carcinogenicity, Category 1A | H350 |
| Reproductive toxicity, Category 1A | H360 |
| Specific target organ toxicity — Repeated exposure, Category 1 | H372 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 1 | H410 |

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

Safety Data Sheet

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

Carc.Cat.1; R45 Muta.Cat.1; R46 Repr.Cat.1; R60 Repr.Cat.1; R61 T+; R26 T; R25 T; R48/23/25 N; R50/53 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) N | o. 1272/2008 [CLP] |
| Hazard pictograms (CLP) | |
| | GHS06 GHS08 GHS09 |
| Signal word (CLP) | : Danger |
| Hazard statements (CLP) | H301 - Toxic if swallowed H330 - Fatal if inhaled H340 - May cause genetic defects H350 - May cause cancer H360 - May damage fertility or the unborn child H372 - Causes damage to organs through prolonged or repeated exposure H410 - Very toxic to aquatic life with long lasting effects |
| Precautionary statements (CLP) | P201 - Obtain special instructions before use P260 - Do not breathe vapours, dust, fume, gas P273 - Avoid release to the environment P284 - [In case of inadequate ventilation] wear respiratory protection P301+P310 - IF SWALLOWED: Immediately call a doctor P310 - Immediately call a POISON CENTER/doctor/ |

2.3. Other hazards

No additional information available

| SECTION 3: Composition/information on ingredients | | |
|---|---------------------------------------|--|
| 3.1. Substance | | |
| Name | : CADMIUM SULPHATE HYDRATE Extra Pure | |
| CAS No | : 7790-84-3 | |
| | | |

Safety Data Sheet

3.2. Mixture

Not applicable

| SECTIO | N 4: First aid measures | |
|-----------|---|--|
| | | |
| 4.1. | Description of first aid measures | |
| First-aid | measures after inhalation | : Assure fresh air breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| First-aid | measures after skin contact | : Wash with plenty of soap and water. 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. Obtain emergency medical attention. |
| 4.2. | Most important symptoms and e | ffects, both acute and delayed |
| Symptor | ns/injuries | : Causes damage to organs through prolonged or repeated exposure. May cause genetic defects. May damage fertility or the unborn child. |
| Symptor | ns/injuries after inhalation | : Fatal if inhaled. |
| Symptor | ns/injuries after ingestion | : Toxic if swallowed. |
| Chronic | symptoms | : May cause cancer. |
| 4.3. | Indication of any immediate med | ical attention and special treatment needed |
| Treat sy | mptomatically. | |
| SECTIO | N 5: Firefighting measures | |
| | | |
| 5.1. | Extinguishing media | |
| | extinguishing media | : Carbon dioxide. Dry powder. Foam. Water spray. |
| Unsultar | ble extinguishing media | : Do not use a heavy water stream. |
| 5.2. | Special hazards arising from the | substance or mixture |
| No addit | tional 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 | |
| Emerge | ncy procedures | : Evacuate unnecessary personnel. |
| 6.1.2. | For emergency responders | |
| | /e equipment | : Use personal protective equipment as required. |
| | ncy procedures | : Ventilate area. |
| | | |
| 6.2. | Environmental precautions | |
| Very tox | ic to aquatic life with long lasting effe | ects. |
| 6.3. | Methods and material for contain | ment and cleaning up |
| Methods | s 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

Safety Data Sheet

| SECTION 7: Handling and storage | |
|-------------------------------------|---|
| | |
| 7.1. Precautions for safe handl | ing |
| Precautions for safe handling | : Avoid contact with skin and eyes. 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 | e, including any incompatibilities |
| Storage 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/per | sonal 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 | : Wear respiratory protection |
| SECTION 9: Physical and chemical prop | perties |
| 9.1. Information on basic physical a | nd chemical properties |
| Physical state | : Solid |
| Colour | : White crystalline. |
| Odour | : odourless. |
| Odour threshold | : No data available |
| рН | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| 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 |

Safety Data Sheet

| Relative vapour density at 20 °C | : No data available |
|----------------------------------|--------------------------|
| Relative density | : No data available |
| Density | : 3.08 g/cm ³ |
| Solubility | : Water: Freely soluble |
| 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 addi | tional information available |
| SECTIC | N 10: Stability and reactivity |
| | |
| 10.1. | Reactivity |
| No addi | tional information available |
| 10.2. | Chemical stability |
| Stable ι | inder normal conditions. |
| 10.3. | Possibility of hazardous reactions |
| No addi | tional information available |
| 10.4. | Conditions to avoid |
| Direct s | unlight. Air contact. Moisture. |
| 10.5. | Incompatible materials |
| No addi | tional information available |
| 10.6. | Hazardous decomposition products |
| No addi | tional information available |
| SECTIC | N 11: Toxicological information |
| | |

| 11.1. Information on toxicological effects | |
|--|---|
| Acute toxicity | : Oral: Toxic if swallowed. Inhalation: Fatal if inhaled. |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : May cause genetic defects. |
| Carcinogenicity | : May cause cancer. |
| Reproductive toxicity | : May damage fertility or the unborn child. |
| Specific target organ toxicity (single exposure) | : Not classified |

Safety Data Sheet

| Specific target organ toxicity (repeated exposure) | : Causes damage to organs through prolonged or repeated exposure. |
|---|---|
| Aspiration hazard | : Not classified |
| Potential adverse human health effects and symptoms | : Toxic if swallowed. |
| SECTION 12: Ecological information | |
| 12.1. Toxicity | |
| Ecology - water | : Very toxic to aquatic life with long lasting effects. |

| 12.2. Persistence and degradability | |
|-------------------------------------|---|
| CADMIUM SULPHATE HYDRATE Extra P | ure (7790-84-3) |
| Persistence and degradability | May cause long-term adverse effects in the environment. |
| | |

| 12.3. | Bioaccumulative potential | |
|--------|--------------------------------------|------|
| No add | lditional information available | |
| | | |
| 40.4 | | |
| 12.4. | Mobility in soil | |
| No add | lditional information available | |
| | | |
| 12.5. | Results of PBT and vPvB assess | mont |
| 12.3. | Results of PDT and VPVD assess | ment |
| No add | Iditional information available | |
| | | |
| | | |
| | | |
| 12.6. | Other adverse effects | |
| No add | lditional information available | |
| SECT | ION 13: Disposal considerations | |
| 02011 | Terr fer Bropedar eeneratieratierite | |
| | | |
| 13.1. | Waste treatment methods | |

| SECTION 14: Transport information | |
|-----------------------------------|------------------------------------|
| Ecology - waste materials | : Hazardous waste due to toxicity. |

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

| 14.1. UN number | |
|-----------------|--------|
| UN-No. (ADR) | : 2570 |
| UN-No. (IMDG) | : 2570 |
| UN-No.(IATA) | : 2570 |
| UN-No.(ADN) | : 2570 |
| UN-No. (RID) | : 2570 |
| | |

Safety Data Sheet

| 14.2. UN proper shipping name | |
|--|---|
| Proper Shipping Name (ADR) | : CADMIUM COMPOUND |
| Proper Shipping Name (IMDG) | : CADMIUM COMPOUND |
| Proper Shipping Name (IATA) | : CADMIUM COMPOUND |
| Proper Shipping Name (ADN) | : CADMIUM COMPOUND |
| Proper Shipping Name (RID) | : CADMIUM COMPOUND |
| Transport document description (ADR) | : UN 2570 CADMIUM COMPOUND, 6.1, III, (E), ENVIRONMENTALLY HAZARDOUS |
| | |
| Transport document description (IMDG) | : UN 2570 CADMIUM COMPOUND, 6.1, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS |
| Transport document description (IATA) | : UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS |
| Transport document description (ADN) | : UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS |
| Transport document description (RID) | : UN 2570 CADMIUM COMPOUND, 6.1, III, ENVIRONMENTALLY HAZARDOUS |
| 14.3. Transport hazard class(es) | |
| ADR | |
| Transport hazard class(es) (ADR) | : 6.1 |
| Danger labels (ADR) | : 6.1 |
| | |
| | |
| | 6 |
| IMDG | |
| Transport hazard class(es) (IMDG) | : 6.1 |
| Danger labels (IMDG) | : 6.1 |
| | . 0.1 |
| | |
| ΙΑΤΑ | |
| Transport hazard class(es) (IATA) | : 6.1 |
| Hazard labels (IATA) | : 6.1 |
| | |
| | |
| | |
| | |
| | |
| | |
| ADN | |
| Transport hazard class(es) (ADN) | : 6.1 |
| Danger labels (ADN) | : 6.1 |
| | LA HANDER |
| | |
| RID Transport hazard class(es) (RID) | : 6.1 |
| Transport Trazaru Glass(es) (RID) | . 0.1 |

Safety Data Sheet

Danger labels (RID)

: 6.1



| 14.4. Packing group | | | |
|-----------------------------|-------|--|--|
| Packing group (ADR) | : 111 | | |
| Packing group (IMDG) | : 111 | | |
| Packing group (IATA) | : 111 | | |
| Packing group (ADN) | : 111 | | |
| Packing group (RID) | : 111 | | |
| | | | |
| 14.5. Environmental hazards | | | |

| Dangerous for the environment | : Yes |
|-------------------------------|--|
| Marine pollutant | : Yes |
| Other information | : No supplementary information available |
| | |

14.6. Special precautions for user

| - Overland transport | |
|---|---------------------------|
| Classification code (ADR) | : T5 |
| Special provision (ADR) | : 274, 596 |
| Limited quantities (ADR) | : 5kg |
| Excepted quantities (ADR) | : E1 |
| Packing instructions (ADR) | : P002, IBC08, LP02, R001 |
| Special packing provisions (ADR) | : B3 |
| Mixed packing provisions (ADR) | : MP10 |
| Portable tank and bulk container instructions (ADR) | : T1 |
| Portable tank and bulk container special provisions (ADR) | : TP33 |
| Tank code (ADR) | : SGAH, L4BH |
| Tank special provisions (ADR) | : TU15, TE19 |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 2 |
| Special provisions for carriage - Bulk (ADR) | : VC1, VC2, AP7 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV13, CV28 |
| Special provisions for carriage - Operation (ADR) | : S9 |
| Hazard identification number (Kemler No.) | : 60 |
| Orange plates | 60 |
| | 2570 |
| Tunnel restriction code (ADR) | : E |
| EAC code | : 2X |
| - Transport by sea | |
| Special provision (IMDG) | : 223, 274 |
| Limited quantities (IMDG) | : 5 kg |
| Excepted quantities (IMDG) | : E1 |

Safety Data Sheet

| Packing instructions (IMDG) | : P002, LP02 |
|---|---------------------------|
| IBC packing instructions (IMDG) | : IBC08 |
| IBC special provisions (IMDG) | : B3 |
| Tank instructions (IMDG) | : T1 |
| Tank special provisions (IMDG) | : TP33 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-A |
| Stowage category (IMDG) | : A |
| MFAG-No | : 154 |
| - Air transport | |
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y645 |
| PCA limited quantity max net quantity (IATA) | : 10kg |
| PCA packing instructions (IATA) | : 670 |
| PCA max net quantity (IATA) | : 100kg |
| CAO packing instructions (IATA) | : 677 |
| CAO max net quantity (IATA) | : 200kg |
| Special provision (IATA) | : A3, A5 |
| ERG code (IATA) | : 6L |
| | |
| - Inland waterway transport | Te |
| Classification code (ADN) | : T5 |
| Special provisions (ADN) | : 274, 596, 802 |
| Limited quantities (ADN) | : 5 kg |
| Excepted quantities (ADN) | : E1 |
| Equipment required (ADN) | : PP, EP |
| Number of blue cones/lights (ADN) | : 0 |
| - Rail transport | |
| Classification code (RID) | : T5 |
| Special provision (RID) | : 274, 596 |
| Limited quantities (RID) | : 5kg |
| Excepted quantities (RID) | : E1 |
| Packing instructions (RID) | : P002, IBC08, LP02, R001 |
| Special packing provisions (RID) | : B3 |
| Mixed packing provisions (RID) | : MP10 |
| Portable tank and bulk container instructions (RID) | : T1 |
| Portable tank and bulk container special provisions (RID) | : TP33 |
| Tank codes for RID tanks (RID) | : SGAH, L4BH |
| Special provisions for RID tanks (RID) | : TU15 |
| Transport category (RID) | : 2 |
| Special provisions for carriage – Bulk (RID) | : VC1, VC2, AP7 |
| Special provisions for carriage – Loading and unloading (RID) | : CW13, CW28, CW31 |
| Colis express (express parcels) (RID) | : CE11 |
| Hazard identification number (RID) | : 60 |
| | |

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Safety Data Sheet

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

CADMIUM SULPHATE HYDRATE Extra Pure is not on the REACH Candidate List CADMIUM SULPHATE HYDRATE Extra Pure 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. BlmSchV (Hazardous Incident Ordinance) |
|---|---|
| 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-phrases:

| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2 |
|---------------------------|---|
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Carc. 1A | Carcinogenicity, Category 1A |
| Muta. 1A | Germ cell mutagenicity, Category 1A |
| Repr. 1A | Reproductive toxicity, Category 1A |
| STOT RE 1 | Specific target organ toxicity — Repeated exposure, Category 1 |
| H301 | Toxic if swallowed |
| H330 | Fatal if inhaled |
| H340 | May cause genetic defects |
| H350 | May cause cancer |
| H360 | May damage fertility or the unborn child |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| | |

Safety Data Sheet

| H410 | Very toxic to aquatic life with long lasting effects |
|-----------|---|
| R25 | Toxic if swallowed |
| R26 | Very toxic by inhalation |
| R45 | May cause cancer |
| R46 | May cause heritable genetic damage |
| R48/23/25 | Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R60 | May impair fertility |
| R61 | May cause harm to the unborn child |
| Ν | Dangerous for the environment |
| Т | Toxic |
| T+ | Very toxic |

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