1  Identification of the substances/ mixture and of the company/ undertaking

1.1  Product Identifiers

Product Number  GRM746
Product Name  Cadmium nitrate tetrahydrate, Hi-LR™
CAS No.  10022-68-1
EC No.  233-710-6

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

1.2.1  Relevant identified uses

Laboratory chemicals, Manufacture of substances

1.3  Details of the supplier of the safety data sheet

Produced by  HiMedia Laboratories Private Limited
Address  23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai - 400 086
Tel. No.  +91-22-2500 0970, +91-22-2500 1607
Fax No.  +91-22-25002468
Mail Id  info@himedialabs.com
Website : www.himedialabs.com

1.4  Emergency Tel. No.

Emergency Tel. No.  Please contact the regional HiMedia representation in your country

2  Hazards Identification

2.1  Classification of the substance or mixture

**CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]**

- Acute toxicity, Oral (Category 3), H301
- Acute toxicity, Inhalation (Category 2), H330
- Acute toxicity, Dermal (Category 4), H312
- Germ cell mutagenicity (Category 1B), H340
- Carcinogenicity (Category 1B), H350
- Specific target organ toxicity - repeated exposure, Oral (Category 1), Kidney, Bone, H372
- Long-term (chronic) aquatic hazard (Category 1), H410

2.2  Label elements

**Labeling according to Regulation (EC) No.1272/2008**

![Pictogram]

Signal word  Danger

Hazard Statement(s)

- H301  Toxic if swallowed.
- H312  Harmful in contact with skin.
- H330  Fatal if inhaled.
- H340  May cause genetic defects.
- H350  May cause cancer.
- H372  Causes damage to organs through prolonged or repeated exposure.
- H410  Very toxic to aquatic life with long lasting effects
Precautionary Statement(s)

P201 Obtain special instructions before use.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P302+P352+P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell.
P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

2.3 Other Hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3 Composition/Information On Ingredients

3.1 Substances
Molecular Formula: Cd(NO₃)₂·4H₂O
Molecular Weight: 308.48
CAS No.: 10022-68-1
EC No.: 233-710-6

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium nitrate tetrahydrate, Hi-LR™</td>
<td>As Per EC Regulation 1272/2008 Acute Tox. 3; Acute Tox.2; Acute Tox. 4; Muta. 1B; Carc. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H301, H330, H312, H340, H350, H372, H400, H410</td>
<td>100%</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements and classification mentioned in this Section, see Section 16.

4 First Aid Measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash with plenty of soap and water. Consult a physician.

In case of eye contact
Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.
4.3 Indication of immediate medical attention and special treatment needed
No data available

5 Fire Fighting Measures
5.1 Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media
No data available.
5.2 Special hazards arising from the substance or mixture
Nitrogen oxides (NOx), Cadmium/cadmium oxides
No data available
5.3 Precautions for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary
5.4 Further information
No data available

6 Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Evacuate personnel to safe areas.
6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.
6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.
6.4 Reference to other sections
For disposal see Section 13.

7 Handling and Storage
7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2
7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended Storage Temperature: Below 30°C
7.3 Specific end uses
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
Exposure Controls/Personal Protection

8.1 Control parameters
Components with workplace control parameters

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment
Hygiene measure
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

Eye/face protection
Faceshield and safety goggles.

Skin protection
Handle with gloves.

Body protection
Complete suit protecting against chemicals.

Respiratory protection
Air-purifying respirators.

Environment exposure controls
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance
Colourless to white crystals or powder or solid or chunks

Odour
No data available

Odour Threshold
No data available

pH
No data available

Melting/freezing point
No data available

Initial boiling point and boiling range
No data available

Flash point
No data available

Upper/lower flammability or explosive limits
No data available

Evaporation rate
No data available

Flammability (Solid, gas)
No data available

Vapour pressure
No data available

Relative density
No data available

Water Solubility
No data available

Partition coefficient: n-octanol/water
No data available

Autoignition Temperature
No data available

Decomposition Temperature
No data available

Viscosity
No data available

Explosive properties
No data available

Oxidizing properties
No data available

Vapour density
No data available

Thermal decomposition
No data available
9.2 Other safety information
No data available

10 Stability and Reactivity
10.1 Reactivity
No data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Incompatible material
10.5 Incompatible materials
Reducing agents, Organic metals, Phosphorus
10.6 Hazardous decomposition products
Other decomposition products - refer section 5.2.
In the event of fire - refer section 5.

11 Toxicological Information
11.1 Information on toxicological effects
Acute toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity
No data available
Specific target organ toxicity- single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS : EV1850000
12 Ecological Information
12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 PBT and vPvB assessment
PBT and vPvB assessment not available. Chemical safety assessment is not required.

12.6 Other adverse effects
Discharge into the environment must be avoided.

13 Disposal Considerations
13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustive solvent and burn in chemical incinerator equipped with an afterburner and scrubber.

13.2 Contaminated packaging
Dispose of as unused product.

14 Transport Information
14.1 UN-No
ADNR : 2570 ADR : 2570 IATA_C : 2570 IATA_P : 2570 IMDG : 2570 RID : 2570

14.2 UN proper shipping name
ADNR : CADMIUM COMPOUND (Cadmium nitrate tetrahydrate)
ADR : CADMIUM COMPOUND (Cadmium nitrate tetrahydrate)
IATA_C : CADMIUM COMPOUND (Cadmium nitrate tetrahydrate)
IATA_P : CADMIUM COMPOUND (Cadmium nitrate tetrahydrate)
IMDG : CADMIUM COMPOUND (Cadmium nitrate tetrahydrate)
RID : CADMIUM COMPOUND (Cadmium nitrate tetrahydrate)

14.3 Transport hazard class(es)

14.4 Packaging group

14.5 Environmental hazards
ADNR : No ADR : No IMDG : Marine Pollutant : Yes IATA_C : No IATA_P : No RID : No

14.6 Special precautions for use
No data available
14.6  Special precautions for use
No data available

15  Regulatory Information
This safety datasheet complies with the requirements of Regulation(EC) No. 1907/2006.

15.1  Safety health and environment regulations/legislation specific for the substance or mixture
No data available

15.2  Chemical Safety Assessment
No data available

16  Other information
Text of H-Statements and EUH-Phrases mentioned in section 3

H301  Toxic if swallowed.
H312  Harmful in contact with skin.
H330  Fatal if inhaled.
H340  May cause genetic defects.
H350  May cause cancer.
H372  Causes damage to organs through prolonged or repeated exposure.
H410  Very toxic to aquatic life with long lasting effects.

Further Information

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The information given in this safety data sheet is believed to be correct yet does not claim to be all
inclusive. This document is intended only as a guide for appropriate precautionary handling of the
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