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

1.1  Product Identifiers

Product Number  GRM733
Product Name  Lead (II) nitrate, Hi-AR™
CAS No. : 10099-74-8
EC No. : 233-245-9

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 India
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. 1272/2006 [EU-GHS/CLP]

Oxidising liquids, (Category 2), H272
Acute toxicity, Oral, (Category 4), H302
Acute toxicity, Inhaled, (Category 4), H332
Serious eye damage or eye irritation, (Category 1), H318
Reproductive toxicity, (Category 1A), H360Df
Specific target organ toxicity, repeated exposure, (Category 2), H373
Hazardous to the aquatic environment, long term hazard, (Category 1), H410

2.2  Label elements

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

Pictogram
Signal word  Danger
Hazard Statement(s)
H272  May intensify fire; oxidizer
H302  Harmful if swallowed
H332  Harmful if inhaled
H318  Causes serious eye damage
H360Df May damage the unborn child. Suspected of damaging fertility
H373 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.
P220 Keep/Store away from clothing/combustible materials.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.

2.3 Other Hazards
none

3 Composition/Information On Ingredients

3.1 Substances
Molecular Formula : Pb(NO₃)₂
Molecular Weight : 331.21
CAS No. : 10099-74-8
EC No. : 233-245-9

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (II) nitrate, Hi-AR™</td>
<td>As Per EC Regulation 1272/2008 Ox. Liq. 2; Acute Tox.oral 4; Acute Tox.inhal. 4; Eye Dam. 1; Repr. 1A; STOT RE 2; Aquatic Chronic 1 H272; H302; H332; H318; H360Df; H373; 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
Take off contaminated clothing and shoes immediately. Wash with plenty of soap and water. Take victim immediately to hospital. 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), Lead oxides

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. Keep away from sources of heat and ignition - No smoking. 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.

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8  **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**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White crystals or powder</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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
Organic materials, Powdered metals
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

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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: OG2100000

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: 1469 ADR: 1469 IATA_C: 1469 IATA_P: 1469 IMDG: 1469 RID: 1469

14.2 UN proper shipping name
ADNR: Lead nitrate
ADR: Lead nitrate
IATA_C: Lead nitrate
IATA_P: Lead nitrate
IMDG: Lead nitrate
RID : Lead nitrate

14.3 **Transport hazard class(es)**
   - ADNR : 5.1
   - ADR : 5.1
   - IATA_C : 5.1
   - IATA_P : 5.1
   - IMDG : 5.1
   - RID : 5.1

14.4 **Packaging group**
   - ADNR : II
   - ADR : II
   - IATA_C : II
   - IATA_P : II
   - IMDG : II
   - RID : II

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

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
     - H272 : May intensify fire; oxidizer
     - H302 : Harmful if swallowed
     - H332 : Harmful if inhaled
     - H318 : Causes serious eye damage
     - H360Df : May damage the unborn child. Suspected of damaging fertility
     - H373 : Causes damage to organs through prolonged or repeated exposure
     - H410 : Very toxic to aquatic life with long lasting effects
     - Ox. Liq. 2 : Oxidising liquids, Category 2
     - Acute Tox.oral 4 : Acute toxicity, oral, Category 4
     - Acute Tox.inhal. 4 : Acute toxicity, inhaled, Category 4
     - Eye Dam. 1 : Serious eye damage or eye irritation, Category 1
     - Repr. 1A : Reproductive toxicity, Category 1A
     - STOT RE 2 : Specific target organ toxicity, repeated exposure, Category 2
     - Aquatic Chronic 1 : Hazardous to the aquatic environment, long term hazard, Category 1

**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 material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper
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