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

1.1 Product Identifiers
Product Code  GRM1396
Product Name  Nickel ammonium sulphate hexahydrate, Hi-AR™

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses  Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet
Produced by  HiMedia Laboratories Pvt. Ltd.
Address  23, Vadhani Indl.Estate, LBS Marg, Mumbai 400 086, India.
Tel. No.  +91-22-2500 0970, +91-22-2500 1607
Fax No.  +91-22-2500 2468

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
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute toxicity, oral (Category 4)
Sensitisation, Skin (Category 1)
Acute toxicity, inhalation (Category 4)
Sensitisation, respiratory (Category 1)
Germ cell mutagenicity (Category 2)
Specific target organ toxicity, repeated exposure (Category 1)
Hazardous to the aquatic environment, long-term hazard (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
May cause cancer.
Harmful if swallowed.
May cause sensitization by inhalation and skin contact.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]
Pictogram

Signal word  Danger

Hazard Statement(s)
H302  Harmful if swallowed
H317  May cause an allergic skin reaction
H332  Harmful if inhaled
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341  Suspected of causing genetic defects
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.
P261  Avoid breathing dust/fume/gas/mist/vapours/spray.
P273  Avoid release to the environment.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P501 Dispose of contents/container to...


Symbol(s)

R-Phrase(s)
R45 May cause cancer.
R22 Harmful if swallowed.
R42/43 May cause sensitization by inhalation and skin contact.

S-Phrase(s)
S53 Avoid exposure - obtain special instructions before use.
S22 Do not breathe dust.
S36/37 Wear suitable protective clothing and gloves.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards - none

3. Composition/Information on Ingredients

3.1 Substances
Synonym: Ammonium nickel sulphate hexahydrate, Hi-AR™

Molecular Formula: \((\text{NH}_4)_2 \text{Ni(SO}_4\text{)}_2 \cdot 6\text{H}_2\text{O}\)
Molecular Weight: 394.99

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel ammonium sulphate hexahydrate, Hi-AR™</td>
<td></td>
</tr>
<tr>
<td>CAS-No.</td>
<td>7785-20-8</td>
</tr>
<tr>
<td>EC-No.</td>
<td>239-793-5</td>
</tr>
</tbody>
</table>

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 off with soap and plenty of water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed
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
No data available

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.
5.2 **Special hazards arising from the substance or mixture**
- nitrogen oxides (NOx), Sulphur oxides, Nickel/nickel 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 vapors, 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.

6.3 **Methods and materials for containment and cleaning up**
- Soak up with inert absorbent material and dispose of as hazardous waste. 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 vapour or mist. Normal measures for preventive fire protection.

7.3 **Conditions for safe storage, including any incompatibilities**
- Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature: Store below 30°C

7.3 **Specific end uses**
No data available

8 **Exposure Controls/Personal Protection**

8.1 **Control parameters**
- Components with workplace control parameters

8.2 **Exposure controls**

**Appropriate engineering controls**
- Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Hygiene measure**
- Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

**Eye/face protection**
- Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
- Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (Without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
- Wash and dry hands.
- The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body protection**
- Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific work place.
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK(EN 14387) respirator cartridges as a backup to the engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environment exposure controls
Do not empty into drains

9 Physical and chemical properties
9.1 Information on basic physical and chemical properties

- Appearance: Green to blue-green crystals or powder or chunks
- Odour: No data available
- Odour Threshold: 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
- Vapour pressure: No data available
- Vapour density: 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

9.2 Other safety information
No data available

10 Stability and Reactivity
10.1 Reactivity
No data available
10.2 Chemical stability
No data available
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
No data available
10.5 Incompatible materials
Strong oxidizing agents
10.6 Hazardous decomposition products
Other decomposition products - No data available

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: No data available
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

**Aspiration hazard**
No data available

**Potential Health Effects**

- **Inhalation.** Refer Section 2
- **Skin** Refer Section 2
- **Eyes** Refer Section 2
- **Ingestion** Refer Section 2

**Additional Information**
RTECS: WS6061000

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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**
No data available

12.6 **Other adverse effects**
No data available

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13 **Disposal Considerations**

13.1 **Waste treatments methods**

- **Product**
  Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose of this material.

13.2 **Contaminated packaging**
Dispoese of as unused product.

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14 **Transport Information**

14.1 **UN-No.**
ADR/RID: 3077  IMDG: 3077  IATA: 3077

14.2 **UN proper shipping name**
ADR/RID: Nickel ammonium sulphate, Hi-AR™
IMDG: Nickel ammonium sulphate, Hi-AR™
IATA: Nickel ammonium sulphate, Hi-AR™

14.3 **Transport hazard class(es)**
ADR/RID: 9  IMDG: 9  IATA: 9

14.4 **Packaging group**
ADR/RID: 3  IMDG: 3  IATA: 3

14.5 **Environmental hazards**
ADR/RID: No  IMDG: Marine Pollutant:No  IATA: 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
Further information
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