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

1.1 Product Identifiers

Product Number M724
Product Name Asparagine Nitrate Medium
REACH Registration Number This product is a mixture. Reach registration number is not available for this mixture.

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

1.2.1 Relevant identified uses Laboratory Chemicals, Analytical Purpose, Biochemical Analysis

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. 1272/2008[EU-GHS/CLP]
Not a hazardous substance or mixture according to Regulation (EC) No.1272/2008.

2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008
The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other Hazards
None

3 Composition/Information On Ingredients

3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium nitrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
</tr>
<tr>
<td>CAS No.: 7757-79-1</td>
<td>Ox. Sol. 3 H272</td>
<td></td>
</tr>
<tr>
<td>EC No.: 231-818-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Component</td>
<td>Classification</td>
<td>Concentration</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Calcium chloride, anhydrous</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. : 10043-52-4</td>
<td>Eye Irrit. 2A</td>
<td>H319</td>
</tr>
<tr>
<td>EC No. : 233-140-8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Ferric chloride            | As Per EC Regulation 1272/2008 | >=0.0001 - <=0.001%    |
| CAS No. : 7705-08-0        | Met. Corr. 1; Acute Tox. oral 4; Skin Irrit. 2; Eye Dam. 1 | H290; H302; H315; H318 |
| EC No. : 231-729-4         |                |                        |

Refer Section 16 for complete statement of H codes and its classification.

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 immediately with plenty of water for at least 15 minutes. 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.

Unsuitable extinguishing media
No data available.

5.2 Special hazards arising from the substance or mixture
Nitrogen oxides (NOx), Sodium oxides, Oxides of phosphorus, Potassium oxides, Magnesium oxides, Sulphur oxides

5.3 Precautions for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary

5.4 Further information
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.

6.3 Methods and materials for containment and cleaning up
Soak up with inert adsorbent 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.

7.2 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: On receipt store between 10-30°C

7.3 Specific end uses
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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 products.

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
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 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 2016/425/EEC and the standard EN ISO 374-1/2016 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 workplace.

**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 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.

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### 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 to cream coloured, homogeneous free flowing 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>Not Applicable</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>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>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 9.2 Other safety information
No data available

---

### 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
10.6 Hazardous decomposition products
Refer Section 5.2

11 Toxicological Information
11.1 Information on toxicological effects
   \textit{Acute toxicity}
   No data available
   \textit{Skin corrosion/irritation}
   No data available
   \textit{Serious eye damage/eye irritation}
   No data available
   \textit{Respiratory or skin sensitisation}
   No data available
   \textit{Germ cell mutagenicity}
   No data available
   \textit{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.
   \textit{Reproductive toxicity}
   No data available
   \textit{Specific target organ toxicity- single exposure}
   No data available

   \textit{Aspiration hazard}
   No data available
   \textit{Potential Health Effects}
   \textit{Inhalation}
   REFER SECTION 2
   \textit{Skin}
   REFER SECTION 2
   \textit{Eyes}
   REFER SECTION 2
   \textit{Ingestion}
   REFER SECTION 2
   \textit{Additional Information}
   RTECS : No data available

11.2 Components
   \textit{Potassium nitrate}
   \textit{Acute oral toxicity}
   Rat LD50: 3,750 mg/kg
   (As per IUCLID)
   \textit{Acute Dermal Toxicity}
   Rat LD50 : > 5000 mg/kg
   (As per OECD Test Guideline 402)
Acute inhalation toxicity
Rat LC50: > 0.527 mg/L; 4 h
(As per OECD Test Guideline 403)

Additional Information
RTECS: TT3700000

Calcium chloride
Acute oral toxicity
Rat LD50: 1,000 mg/kg
(As per IUCLID)

Acute dermal toxicity
Rat LD50: 2,630 mg/kg
(As per IUCLID)

Skin irritation
Rabbit
Result: No irritation
(As per OECD Test Guideline 404)

Eye irritation
Rabbit
Result: Eye irritation
(As per OECD Test Guideline 405)
Causes serious eye irritation.

Additional Information
RTECS: EV9800000

Ferric chloride
Acute oral toxicity
Rat LD50: 3,200mg/kg (As per OECD Guideline 401)

Acute inhalation toxicity
No data available

Acute dermal toxicity
Rabbit LD50: > 559mg/kg (As per EPA OPP 81-2)\nSkin irritation
Rabbit Result: Non Irritant (As per OECD Guideline 404)

Eye irritation
Rabbit Result: Irreversible effects on the eye (ECHA)
Sensitisation
Guinea pig Result: Not sensitising

Genetic toxicity(in-vitro)
Mammalian cell gene mutation assay
Mouse lymphoma cells Result: Negative
Genetic toxicity(in-vivo)
Mouse Result: Positive (ECHA)
Carcinogenicity
No data available
Toxicity to Reproduction
No data available
12 Ecological Information

12.1 Toxicity
No data available

Components

Potassium nitrate
Toxicity to Fish
Bluegill (Lepomis macrochirus) LC50: 420 mg/kg; 96 h.
Western mosquitofish (Gambusia affinis) LC50: 62 mg/kg; 96 h.
Poecilia reticulata (guppy) LC50: 191 mg/l; 96 h
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 490 mg/l; 48 h
(As per IUCLID)

Components

Calcium chloride
Toxicity to fish
Lepomis macrochirus (Bluegill sunfish) LC50: 10,650 mg/l; 96 h
(As per IUCLID)
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 144 mg/l; 48 h
(As per IUCLID)
Toxicity to algae
Algae IC50: 3,130 mg/l; 120 h
(As per IUCLID)

Components:

Ferric chloride
Toxicity to microorganisms
Activated sludge IC50: ca. 170 mg/L (ECHA)

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
This substance or mixture contains no components considered to be persistent, bioaccumulating nor toxic (PBT) at levels of 0.1% or higher.
12.6 Other adverse effects
No data available

13 Disposal Considerations
13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licenced company. Contact a licenced professional waste disposal service to dispose off this material.

13.2 Contaminated packaging
Dispose of as unused product.

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

14.2 UN proper shipping name
ADNR: Not dangerous goods
ADR: Not dangerous goods
IATA_C: Not dangerous goods
IATA_P: Not dangerous goods
IMDG: Not dangerous goods
RID: Not dangerous goods

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

14.4 Packaging group
ADNR: ADR: IATA_C: IATA_P: IMDG: RID:

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

14.6 Special precautions for use
No data available

15 Regulatory Information
This safety data sheet 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

H272 May intensify fire; oxidizer
H290 May be corrosive to metals
H302 Harmful if swallowed
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 handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.