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

1.1 Product Identifiers
Product Number: GM643
Product Name: Mineral Modified Glutamate Medium Base, Granulated (Double Strength) (Twin Pack)
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>Nicotinic acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.001 - &lt;=0.01%</td>
</tr>
<tr>
<td>CAS No.: 59-67-6</td>
<td>Eye Irrit. 2A H319</td>
<td></td>
</tr>
<tr>
<td>EC No.: 200-441-0</td>
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</table>

www.himedialabs.com
Safety data sheet(SDS)
Revision: 00002
Date of Revision: 08.11.2019
### Component Classification Concentration

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferric ammonium citrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
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<td>CAS No. :</td>
<td>1185-57-5</td>
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<tr>
<td>EC No. :</td>
<td>214-686-6</td>
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<tr>
<td></td>
<td>Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium chloride, anhydrous</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>10043-52-4</td>
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</tr>
<tr>
<td>EC No. :</td>
<td>233-140-8</td>
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</tr>
<tr>
<td></td>
<td>Eye Irrit. 2A H319</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromocresol purple</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.01 - &lt;=0.1%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>115-40-2</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>204-087-8</td>
<td></td>
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<tr>
<td></td>
<td>Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335</td>
<td></td>
</tr>
</tbody>
</table>

Refer Section 16 for complete statement of H codes & 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
Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas, Iron oxides, Magnesium oxides, Calcium oxide

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.

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.

### 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><strong>Appearance</strong></td>
<td>Part A : Light yellow to green coloured granular medium Part B : White to cream homogenous free flowing powder</td>
</tr>
<tr>
<td><strong>Odour</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Odour Threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>6.50 - 6.90</td>
</tr>
<tr>
<td><strong>Melting/freezing point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability (Solid, gas)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Water Solubility</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>No data available</td>
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<tr>
<td><strong>Thermal decomposition</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>

#### 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
No data available
10.6  Hazardous decomposition products
Other Decomposition products. No Data Available. Refer Section 5.2

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

**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**
11.2 Components

Ferric ammonium citrate

*Acute Oral Toxicity*

Rat LD50: >2000 mg/kg

*Acute Potential Health Effects*

*Skin*

Contact may cause irritation or rash, particularly with moist skin.

*Eyes*

May cause eye irritation with redness, tearing, and abrasion.

*Inhalation*

Inhalation of high concentrations of dust may cause nasal, throat or lung irritation. Symptoms may include coughing and wheezing.

*Ingestion*

Ingestion can produce gastrointestinal tract irritation with hyper motility, diarrhea.

*Chronic Potential Health Effects*

*Eyes*

Prolonged eye contact may cause a brownish discoloration of the eyes.

*Skin*

Prolonged skin contact may cause skin irritation.

Additional information:

RTECS: GE7540000

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

Niacin (Nicotinic acid)

*Acute oral toxicity*

Rat LD50: >5000 mg/kg; 24h (ECHA)
Acute dermal toxicity
Rat LD50: >2000 mg/kg; 24h (ECHA)

Acute inhalation toxicity
Rat LD50: >3.8 mg/L; 4h (ECHA)

Skin irritation
Rabbit: Does not cause irritation to skin (ECHA)

Eye irritation
Rabbit: May cause slight to mild irritation to eyes (ECHA)

Sensitisation
Nonsensitizer (ECHA)
Repeated Exposures
No significant effect seen on rats (ECHA)

Germ cell mutagenicity
Genotoxicity invitro
Chinese hamster Ovary (CHO)
Result: Negative (ECHA)
Genotoxicity invivo
Mammalian Bone Marrow Chromosome Aberration Test
Result: Negative (ECHA)

Mutagenicity (mammal cell test): micronucleus
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available
Teratogenicity
Rats, 20 d
Result: Negative (ECHA)

Additional information
RTECS QT0525000

Bromocresol purple
Acute oral toxicity
No data available
Acute inhalation toxicity
May cause respiratory irritation
Acute dermal toxicity
No data available
Skin irritation
May cause skin irritation
Eye irritation
May cause eye irritation
Sensitisation
No data available
Genetic toxicity (in-vitro)
No data available
**Genetic toxicity**(in-vivo)  
No data available  

**Carcinogenicity**  
No data available  

**Toxicity to Reproduction**  
No data available  

**Teratogenicity**  
No data available  

**Additional information:**  
RTECS: No data available

---

12  
**Ecological Information**

12.1  
**Toxicity**  
No data available for this mixture

**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**

**Niacin**(Nicotinic acid)

*Toxicity to fish*

Brown trout (Salmo Trutta Fario) LC50: 520 mg/l; 96 h (ECHA)  

*Toxicity to daphnia and other aquatic invertebrates*

Daphnia magna EC50: 77 mg/L; 48 h (ECHA)  

*Toxicity to algae*

Desmodesmus subspicatus Scenedesmus subspicatus)  
EC50: 89.93 mg/L 72 h (ECHA)  

*Toxicity to microorganisms*

Pseudomonas putida EC50: 120 mg/L; 16 h (ECHA)  
Pseudomonas putida EC10: 88 mg/L; 16 h (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
16 Other information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage or eye irritation, Category 2A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3</td>
</tr>
</tbody>
</table>

Further Information

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