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

1.1  Product Identifiers

<table>
<thead>
<tr>
<th>Product Number</th>
<th>TS1053</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>Gamborg B5/Kao Michayluk Microelements (100X)</td>
</tr>
<tr>
<td>REACH Registration Number</td>
<td>Reach registration number is not available for this mixture. According to REACH regulation EC 1907/2006 this product is exempted from registration. The annual tonnage does not require a REACH registration or it is envisaged for a later registration deadline.</td>
</tr>
</tbody>
</table>

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

1.2.2  Uses advised against

- No data available

1.3  Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Produced by</th>
<th>HiMedia Laboratories Private Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai - 400 086 India</td>
</tr>
<tr>
<td>Tel. No.</td>
<td>+91-22-2500 0970, +91-22-2500 1607</td>
</tr>
<tr>
<td>Mail Id</td>
<td><a href="mailto:ptc@himedialabs.com">ptc@himedialabs.com</a></td>
</tr>
<tr>
<td>Fax No.</td>
<td>+91-22-2500 0970, +91-22-2500 1607</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.himedialabs.com">www.himedialabs.com</a></td>
</tr>
</tbody>
</table>

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]**

- Specific target organ toxicity, repeated exposure, (Category 2), H373
- Hazardous to the aquatic environment, long term hazard, (Category 2), H411

For the full text of the H-Statements mentioned in this Section, See Section 16

2.2  Label elements

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

- Pictogram
- Signal word: Warning

**Hazard Statement(s)**

- H373: May cause damage to organs through prolonged or repeated exposure
- H411: Toxic to aquatic life with long lasting effects

**Precautionary Statement(s)**
Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF exposed: call a POISON CENTER or doctor/physician.

Collect spillage. Hazardous to the aquatic environment

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
3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=10 - &lt;=15%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>STOT RE 2; Aquatic Chronic 2</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>H373; H411</td>
<td></td>
</tr>
<tr>
<td>Index-No :</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boric acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=2 - &lt;=5%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>Repr.Tox. 1A, 1B H360</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No :</td>
<td>005-007-00-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc sulphate, heptahydrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1 - &lt;=3%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>Acute Tox.oral 4; Eye Dam. 1;</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>Aquatic Chronic 1 H302, H318; H410</td>
<td></td>
</tr>
<tr>
<td>Index-No :</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium iodide</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.8 - &lt;=1.0%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td>Acute Tox.oral 4; Skin Irrit. 2</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>Eye Irrit. 2A H302, H315; H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></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
Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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
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
Treat symptomatically.

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
Magnesium oxides, Sulphur oxides, Sodium oxides, Iron oxides, Calcium Oxide, Cobalt oxides, Copper oxides, Manganese oxides, Molybdenum oxides, Oxides of Phosphorus, Potassium oxides, Zinc oxides
5.3 Precautions for fire-fighters
Cool closed containers exposed to fire with water spray.
5.4 Further information
Wear self-contained breathing apparatus for firefighting if necessary.

6 Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures
Use personnel protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
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
Keep in suitable, closed containers for disposal. 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 formation of dust and aerosols. Wear protective gloves and eye/face protection. Use only in
well ventilated areas. Keep away from heat, sparks and open flame.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool/well-ventilated place.
Recommended Storage Temperature: 2 - 8°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

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

Personal protective equipment
Eye/face protection
Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested and
approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Have eye-
washing facilities readily available where eye contact can occur.

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
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 workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle
respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering
controls. Use respirators and components tested and approved under appropriate government
standards such as NIOSH (US) or CEN (EU).

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**: Yellow to greenish yellow powder
- **Odour**: No data available
- **Odour Threshold**: No data available
- **pH**: 1.9 - 2.9
- **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**: Soluble in water
- **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

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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**

No data available

10.5 **Incompatible materials**

No data available

10.6 **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions - Nitrogen oxides(NOx), Sulphur oxides, Oxides of phosphorus, Potassium oxides, Magnesium oxide, Cobalt/cobalt oxides, Calcium oxide, Copper oxides

---

11  **Toxicological Information**

11.1 **Information on toxicological effects**
**Acute toxicity**
No data available
Remarks : No data available
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 - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS : Not Applicable

---

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
This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6  Other adverse effects

---

13  Disposal Considerations
13.1  Waste treatments methods
Product
Dispose of as unused product.

13.2  Contaminated packaging
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material.

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
ADR : No IMDG : Marine Pollutant : No IATA_C : 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
15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out.

16 Other information

H302 Harmful if swallowed
H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H360 May damage fertility or the unborn child
H373 May cause damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects
Acute Tox.oral 4 Acute toxicity, oral, Category 4
Aquatic Chronic 1 Hazardous to the aquatic environment, long term hazard, Category 1
Aquatic Chronic 2 Hazardous to the aquatic environment, long term hazard, Category 2
<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage or eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage or eye irritation, Category 2A</td>
</tr>
<tr>
<td>Repr.Tox. 1A, 1B</td>
<td>Reproductive toxicity, Category 1A, 1B</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion or irritation, Category 2</td>
</tr>
<tr>
<td>STOT RE 2</td>
<td>Specific target organ toxicity, repeated exposure, Category 2</td>
</tr>
</tbody>
</table>

**Further Information**

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