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

1.1 Product Identifiers
Product Number M1958
Product Name BG11 Broth w/Minerals
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]
Oxidising solids, (Category 3), H272
Serious eye damage or eye irritation, (Category 2A), H319

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

Pictogram
Signal word          Warning

Hazard Statement(s)
H272 May intensify fire; oxidizer
H319 Causes serious eye irritation

Precautionary Statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P220 Keep/Store away from clothing/combustible materials.
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.

P337 + P313 IF eye irritation persists: Get medical advice/attention.

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>Sodium nitrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=80 - &lt;=90%</td>
</tr>
<tr>
<td>CAS No.: 7631-99-4</td>
<td>Ox. Sol. 3; Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3</td>
<td></td>
</tr>
<tr>
<td>EC No.: 231-554-3</td>
<td>H272; H302; H315; H319; H335</td>
<td></td>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>Calcium chloride, dihydrate</td>
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<td>&gt;=1.0 - &lt;=3.0%</td>
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<tr>
<td>CAS No.: 10035-04-8</td>
<td>Eye Irrit. 2A H319</td>
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<tr>
<td>EC No.: 233-140-8</td>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Ferric ammonium citrate</td>
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<td>&gt;=0.1 - &lt;=1.0%</td>
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<td>CAS No.: 1185-57-5</td>
<td>Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3</td>
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<tr>
<td>EC No.: 214-686-6</td>
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<tr>
<th>Component</th>
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<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=1.0 - &lt;=10.0%</td>
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<td>CAS No.: 497-19-8</td>
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<td>EC No.: 207-838-8</td>
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<tr>
<td>Boric acid</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 - &lt;=1.0%</td>
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<td>CAS No.: 10043-35-3</td>
<td>Repr.Tox. 1A, 1B H360</td>
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### Component Classification Concentration

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<tr>
<th>Component</th>
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<tr>
<td>Manganese chloride tetrahydrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 &lt;=1.0%</td>
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<tr>
<td>CAS No.: 13446-34-9</td>
<td>Acute Tox.oral 4 H302</td>
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<td>EC No.: 231-869-6</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
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</thead>
<tbody>
<tr>
<td>Zinc sulphate heptahydrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 &lt;=1.0%</td>
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<tr>
<td>CAS No.: 7446-20-0</td>
<td>Acute Tox.oral 4; Eye Dam. 1; Aquatic Chronic 1</td>
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<td>EC No.: 231-793-3</td>
<td>H302; H318; H319; H410</td>
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<tr>
<td>Index-No : 030-006-00-9</td>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper sulphate pentahydrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 &lt;=1.0%</td>
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<tr>
<td>CAS No.: 7758-99-8</td>
<td>H302; H315; H319; H410</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobalt nitrate, hexahydrate</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=0.1 &lt;=1.0%</td>
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<tr>
<td>CAS No.: 10026-22-9</td>
<td>Ox. Liq. 2; Acute Tox.oral 4; Skin Sens. 1; Resp. Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; Aquatic Chronic 1 H272; H302; H317; H334; H341; H350; H360; H410</td>
<td></td>
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<tr>
<td>EC No.: 233-402-1</td>
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</tr>
</tbody>
</table>

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 with plenty of soap and 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
Sodium oxides, Nitrogen oxides (NOx),
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 absorbent material. 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>Appearance</td>
<td>Off white to cream 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>
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<tr>
<td>pH</td>
<td>7.10</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
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<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>
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<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
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<tr>
<td>Vapour pressure</td>
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<td>Relative density</td>
<td>No data available</td>
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<td>Water Solubility</td>
<td>No data available</td>
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<td>Partition coefficient: n-octanol/water</td>
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<tr>
<td>Autoignition Temperature</td>
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<tr>
<td>Viscosity</td>
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<td>Explosive properties</td>
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<tr>
<td>Oxidizing properties</td>
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<tr>
<td>Vapour density</td>
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<tr>
<td>Thermal decomposition</td>
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</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
Refer Section 5.2. Other Decomposition products not known.

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

Potential Health Effects
Inhalation
REFER SECTION 2
Skin
REFER SECTION 2
Eyes
REFER SECTION 2
Ingestion
REFER SECTION 2

Additional Information
RTECS : No data available
11.2 Components

**Sodium nitrate**

*Acute Oral Toxicity*
- Mouse LD50: 3500 mg/kg
- Rabbit LD50: 2680 mg/kg
- Rat LD50: 1267 mg/kg

*Acute Inhalation Toxicity*
- Rat LC50: 5.5 mg/l; 4 h

**Additional Information**
- RTECS: WC5600000

**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

**Sodium carbonate**

*Acute Oral Toxicity*
- Rat LD50: 4090 mg/kg

*Acute inhalation toxicity*
- Rat LC50: 5750 mg/l; 2 h

**Additional information**
- RTECS: VZ4050000

**Boric Acid**

*Acute Toxicity*
- Rat oral LD50: 2660 mg/kg
- Rabbit dermal LD50: 2000 mg/kg
- Mouse Oral: LD50 = 3450 mg/kg.
Additional information
RTECS : ED4550000
Specific concentration limits (SCL): >5.5%
Boric acid is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH)

Manganese Chloride, Tetrahydrate
Acute Oral Toxicity
Rat LD50 : 1484 mg/kg

Additional Information
RTECS: OO9650000

Zinc Sulphate, Heptahydrate
Acute Oral Toxicity
Rat LD50: 1,260 mg/kg (As Per RTECS)
Additional information
RTECS: ZH5300000

12 Ecological Information
12.1 Toxicity
No data available for this mixture

Components
Sodium nitrate
Toxicity to Fish
Oncorhynchus mykiss LC50 : 994.4 - 1107 mg/L; 96h
Lepomis macrochirus LC50: 2000 mg/L; 96h

Ammonium Ferric Citrate
Eco toxicity
No data available.

Components:
Sodium carbonate
Toxicity to fish
Lepomis macrochirus (bluegill)LC50: 300 mg/l; 96 h
Toxicity to daphnia
Daphnia magna (water flea)EC50: 265 mg/l; 48 h
Daphnia magna (water flea)EC50: 265 mg/l; 72 h

Component
Boric Acid
Toxicity to fish
Gambusia affinis LC50 :5600 mg/l
Rainbow trout LC50:150mg B/L;24d
Goldfish LC50:46mg; 7d
Toxicity to daphnia and other aquatic invertebrates
Daphnia EC50 :115 mg/l
Manganese Chloride, Tetrahydrate

*Toxicity to fish*
Carassius auratus (goldfish) LC50: 18.8 mg/l; 7 d

*Toxicity to daphnia and other aquatic invertebrates*
Daphnia magna (Water flea) EC50: >11 mg/l; 48 h

Components
Zinc Sulphate, Heptahydrate
Toxicity to fish
Oncorhynchus mykiss (rainbow trout) LC50: 0.1 mg/l; 96 h
(As Per ECOTOX Database)

Toxicity to algae
Scenedesmus quadricuad (green algae) IC50: 0.52 mg/l; 5 d
(As Per IUCLID)

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

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 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)
14.4 Packaging group

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 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 codes and classification mentioned in section 3
H272  May intensify fire; oxidizer
H302  Harmful if swallowed
H315  Causes skin irritation
H317  May cause an allergic skin reaction
H318  Causes serious eye damage
H319  Causes serious eye irritation
H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335  May cause respiratory irritation
H341  Suspected of causing genetic defects
H350i  May cause cancer by inhalation
H360  May damage fertility or the unborn child
H410  Very 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
Carc. 1B  Carcinogenicity, Category 1B
Eye Dam. 1  Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A  Serious eye damage or eye irritation, Category 2A
Muta. 2  Germ cell mutagenicity, Category 2
Ox. Liq. 2  Oxidising liquids, Category 2
Ox. Sol. 3  Oxidising solids, Category 3
Repr. 1B  Reproductive toxicity, Category 1B
Repr.Tox. 1A, 1B  Reproductive toxicity, Category 1A, 1B
Resp. Sens. 1  Sensitisation, respiratory, Category 1
Skin Irrit. 2  Skin corrosion or irritation, Category 2
Skin Sens. 1  Sensitisation, Skin, Category 1
STOT SE 3  Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3
Further Information

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