

**1 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  
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**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

Component	Classification	Concentration
Sodium nitrate		
CAS No. : 7631-99-4 EC No. : 231-554-3	<b>As Per EC Regulation 1272/2008</b> Ox. Sol. 3; Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H272; H302; H315; H319; H335	>=80 - <=90%

Component	Classification	Concentration
Calcium chloride,dihydrate		
CAS No. : 10035-04-8 EC No. : 233-140-8	<b>As Per EC Regulation 1272/2008</b> Eye Irrit. 2A H319	>=1.0 - <=3.0%

Component	Classification	Concentration
Ferric ammonium citrate		
CAS No. : 1185-57-5 EC No. : 214-686-6	<b>As Per EC Regulation 1272/2008</b> Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3 H315; H319; H335	>=0.1 - <=1.0%

Component	Classification	Concentration
Sodium carbonate		
CAS No. : 497-19-8 EC No. : 207-838-8 Index-No : 011-005-00-2	<b>As Per EC Regulation 1272/2008</b> Eye Irrit. 2A H319	>=1.0 - <=10.0%

Component	Classification	Concentration
Boric acid		
CAS No. : 10043-35-3 EC No. : 233-139-2 Index-No : 005-007-00-2	<b>As Per EC Regulation 1272/2008</b> Repr.Tox. 1A, 1B H360	>=0.1 - <=1.0%

Component	Classification	Concentration
Manganese chloride tetrahydrate		
CAS No. : 13446-34-9 EC No. : 231-869-6	<b>As Per EC Regulation 1272/2008</b> Acute Tox.oral 4 H302	>=0.1 - <=1.0%

Component	Classification	Concentration
Zinc sulphate heptahydrate		
CAS No. : 7446-20-0 EC No. : 231-793-3 Index-No : 030-006-00-9	<b>As Per EC Regulation 1272/2008</b> Acute Tox.oral 4; Eye Dam. 1; Aquatic Chronic 1 H302; H318; H410	>=0.1 - <=1.0%

Component	Classification	Concentration
Copper sulphate pentahydrate		
CAS No. : 7758-99-8	<b>As Per EC Regulation 1272/2008</b> H302; H315; H319; H410	>=0.1 - <=1.0%

Component	Classification	Concentration
Cobalt nitrate, hexahydrate		
CAS No. : 10026-22-9 EC No. : 233-402-1	<b>As Per EC Regulation 1272/2008</b> 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; H350i; H360; H410	>=0.1 - <=1.0%

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

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## **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 (NO<sub>x</sub>),

### **5.3 Precautions for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary

### **5.4 Further information**

No data available

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## **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.

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## **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.

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## **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**

Appearance	Off white to cream homogeneous free flowing powder
Odour	No data available
Odour Threshold	No data available
pH	7.10
Melting/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Flammability (Solid, gas)	No data available
Vapour pressure	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
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**

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.

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**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*

RatLD50: >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

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**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

**Components**



## **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 quadricuada (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

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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 off this material.

### **13.2 Contaminated packaging**

Dispose of as unused product.

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## **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 : III ADR : III IATA\_C : III IATA\_P : III IMDG : III RID : III

#### 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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