

**1 Identification of the substances/ mixture and of the company/ undertaking****1.1 Product Identifiers**

Product Number M342  
Product Name Algae Culture Broth  
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**

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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

Skin corrosion or irritation, (Category 2), H315

Serious eye damage or eye irritation, (Category 2A), H319

Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335

**2.2 Label elements**

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



Pictogram

Signal word Warning

Hazard Statement(s)

H272 May intensify fire; oxidizer

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

Precautionary Statement(s)

- P210. Keep away from heat/sparks/open flames/hot surfaces.
- P220 Keep/Store away from clothing/combustible materials.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302 + P352 IF ON SKIN: wash with plenty of soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 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	>=50.0 - <=60.0%

Component	Classification	Concentration
Ammonium chloride		
CAS No. : 12125-02-9 EC No. : 235-186-4 Index-No : 017-014-00-8	<b>As Per EC Regulation 1272/2008</b> Acute Tox.oral 4; Eye Irrit. 2A H302; H319 <b>As Per EC Directive 67/548/EEC or 1999/45/EC</b> Xn; Xi R22; R36	>=1.0 - <=10.0%

Component	Classification	Concentration
Calcium chloride, anhydrous		
CAS No. : 10043-52-4 EC No. : 233-140-8	<b>As Per EC Regulation 1272/2008</b> Eye Irrit. 2A H319	>=1.0 - <=10.0%

Component	Classification	Concentration
Ferric chloride		
CAS No. : 7705-08-0 EC No. : 231-729-4	<b>As Per EC Regulation 1272/2008</b> Met. Corr. 1; Acute Tox.oral 4; Skin Irrit. 2; Eye Dam. 1 H290; H302; H315; H318	>=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 (NOx), Oxides of phosphorus, Potassium oxides, Magnesium oxide, Sulphur oxides, Hydrogen chloride gas, 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

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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.

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## **9 Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

Appearance

White to light yellow coloured homogeneous

	free flowing powder
Odour	No data available
Odour Threshold	No data available
pH	6.80 - 7.20
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

## 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

Strong oxidizing agents

### 10.6 Hazardous decomposition products

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***

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

**Ammonium Chloride*****Acute Oral toxicity***

Rat LD50:1,650 mg/kg

***Irritation and corrosion***

Skin: rabbit: No skin irritation

Eyes: rabbit: Eye irritation

***Sensitisation:***

Non sensitizer

***Signs and Symptoms of Exposure:***

No data available

***Potential Health Effects******Inhalation***

May be harmful if inhaled. May cause respiratory tract irritation.

**Additional Information**

RTECS : BP4550000

**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)

Skin 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

Teratogenicity

No data available

**Additional information:**

RTECS: LJ9100000

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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

**Components**

**Ammonium chloride**

*Toxicity to fish*

Oncorhynchus mykiss (rainbow trout)LC50: 42.91 mg/l; 96 h

(AS per ECHA)

Cyprinus carpio (Carp) LC50:209.00 mg/l;96 h

Lepomis macrochirus (Bluegill sunfish) EC10:4.28 mg/l; 30 d

(As per ECHA)

*Toxicity to daphnia and other aquatic invertebrates*

Daphnia magna (Water flea)EC50: > 100 mg/l; 48 h

(As per ECHA)

Daphnia magna (Water flea)LC50: 161 mg/l - 48 h

*Toxicity to algae*

Chlorella vulgaris (Fresh water algae)EC50: 1,300 mg/l; 5 d

(As per ECHA)

*Toxicity to bacteria*

EC50 activated sludge: 1,310 mg/l; 0.5 h

(OECD Test Guideline 209)

**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*

AlgaeLC50 : 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**

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)**

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

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**16 Other information**

Text of H codes and classification mentioned in section 3

H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
Acute Tox.oral 4	Acute toxicity, oral, Category 4
Eye Dam. 1	Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A	Serious eye damage or eye irritation, Category 2A
Met. Corr. 1	Corrosive to metals, Category 1
Ox. Sol. 3	Oxidising solids, Category 3
Skin Irrit. 2	Skin corrosion or irritation, Category 2
STOT SE 3	Specific target organ toxicity, single exposure, Respiratory tract

**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.