

## MIDDLEBROOK 7H9 BROTH BASE

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** Middlebrook 7H9 Broth Base

**Product Code:** CM 21190

**REACH Registration Number:** This product is a mixture. Reach registration number is not available for this mixture

**Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses :Laboratory Chemicals, Analytical Purpose, Biochemical Analysis. For InVitro Diagnostic Use

### SECTION 2: HAZARDS IDENTIFICATION

**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.

**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.

**Other hazards**

None

### SECTION 3: COMPOSITION /INFORMATION ON INGREDIENTS

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

| Component                                  | Classification                                              | Concentration  |
|--------------------------------------------|-------------------------------------------------------------|----------------|
| Calcium chloride, anhydrous                |                                                             |                |
| CAS No. : 10043-52-4<br>EC No. : 233-140-8 | <b>As Per EC Regulation 1272/2008</b><br>Eye Irrit. 2A H319 | >=1.0 - <=5.0% |

| Component                                 | Classification                                                                    | Concentration   |
|-------------------------------------------|-----------------------------------------------------------------------------------|-----------------|
| Zinc sulphate                             |                                                                                   |                 |
| CAS No. : 7446-19-7<br>EC No. : 231-793-3 | <b>As Per EC Regulation 1272/2008</b><br>Eye Dam. 1; Aquatic Chronic 1 H318; H410 | >=0.01 - <=0.1% |

| Component                                 | Classification                                                                                                                                                                                                                     | Concentration   |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Copper sulphate                           |                                                                                                                                                                                                                                    |                 |
| CAS No. : 7758-98-7<br>EC No. : 231-847-6 | <b>As Per EC Regulation 1272/2008</b><br>Acute Tox.oral 4;<br>Skin Irrit. 2;<br>Eye Irrit. 2A;<br>Aquatic Chronic 1 H302; H315; H319; H410<br><b>As Per EC Directive 67/548/EEC or 1999/45/EC</b><br>Xn; Xi; N R22; R36/38; R50/53 | >=0.01 - <=0.1% |

Refer Section 16 for complete statement of H codes and its classification



**SECTION 4: FIRSTAID MEASURES****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.

**Most important symptoms and effects, both acute and delayed**

No data available.

**Indication of immediate medical attention and special treatment needed**

No data available

**SECTION 5: FIRE FIGHTING MEASURES****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media**

No data available

**Special hazards arising from the substance or mixture**

Carbon oxides, Hydrogen chloride gas, Sodium oxides

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available

**SECTION 6: ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**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.

**Reference to other sections**

For disposal see section 13.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

**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 10-25°C

**Specific end uses**



Apart from the uses mentioned in section 1, no other specific uses are stipulated.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

Components with workplace control parameters

### **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 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 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.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

- |                                                 |                                                            |
|-------------------------------------------------|------------------------------------------------------------|
| a) Appearance                                   | : Cream to beige coloured homogeneous free flowing powder. |
| b) Odour                                        | : No data available                                        |
| c) Odour Threshold                              | : No data available                                        |
| d) pH                                           | : 6.40 - 6.80                                              |
| e) Melting point/freezing point                 | : No data available                                        |
| f) Initial boiling point and boiling range      | : No data available                                        |
| g) Flash point                                  | : No data available                                        |
| h) Evaporation rate                             | : No data available                                        |
| i) Flammability (solid, gas)                    | : No data available                                        |
| j) Upper/lower flammability or explosive limits | : No data available                                        |
| k) Vapour pressure                              | : No data available                                        |
| l) Vapour density                               | : No data available                                        |
| m) Relative density                             | : No data available                                        |
| n) Water solubility                             | : No data available                                        |
| o) Partition coefficient octanol/water          | : No data available                                        |
| p) Auto-ignition temperature                    | : No data available                                        |



|                              |                     |
|------------------------------|---------------------|
| q) Decomposition temperature | : No data available |
| r) Viscosity                 | : No data available |
| s) Explosive properties      | : No data available |
| t) Oxidizing properties      | : No data available |

**Other safety information**

No data available

**SECTION 10: STABILITY AND REACTIVITY DATA****Reactivity:** No data available**Chemical stability:** No data available.**Possibility of hazardous reactions:** No data available**Conditions to avoid:** No data available**Incompatible materials:** No data available**Hazardous decomposition products:** Refer Section 5**SECTION 11: TOXICOLOGICAL INFORMATION****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 sensitization:** No data available**Germ cell mutagenicity:** No data available**Carcinogenicity:**

IARC: No component of this product is 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: Not available**Components****Ferric ammonium citrate**

Acute Oral Toxicity Rat LD50: &gt;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**Copper sulphate**

Acute oral toxicity Rat LD50: 482 mg/kg Acute dermal toxicity Rat LD50:&gt;2000 mg/kg

Skin irritation Rabbit Result: Non irritant

Eye irritation Rabbit Result: Highly irritating

Skin sensitization Guinea pig Result: Non sensitizing Genetic toxicity(in-vitro)

Ames test Result: Negative (As Per OECD Test Guideline 471) Genetic toxicity(in-vivo)

Mouse Micronucleus assay Result: Negative



Carcinogenicity Rat Result: Negative Toxicity to Reproduction No data available

Teratogenicity No data available

**Additional information:** RTECS: GL8800000

**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

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

**Additional information** RTECS: ZH5300000

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

No data available

### 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 quadricauda* (green algae) IC50: 0.52 mg/l; 5 d (As Per IUCLID)

#### **Component: Copper sulphate**

Toxicity to fish *Oncorhynchus mykiss* Flow through test LC50: 200 µg/L; 96h

Toxicity to aquatic invertebrates *Daphnia magna* (Water flea) Static test LC50: 7 µg/L; 48h

Toxicity to aquatic alga and cyanobacteria *Phaeodactylum tricornutum* Static test EC10: 2.9 µg/L; 72h

Toxicity to terrestrial arthropods *Folsomia fimetaria* EC10 : 688 mg/kg; 21d

#### **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)

**Ammonium Ferric Citrate** Eco toxicity No data available.

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

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

**Other adverse effects** No data available

## SECTION 13: DISPOSAL CONSIDERATION

### **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.

#### **Contaminated packaging**

Dispose of as unused product

## SECTION 14: TRANSPORT INFORMATION

### **UN - No**

ADNR : ADR : IATA\_C : IATA\_P : IMDG : RID :

### **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

**Transport hazard class(es)**

ADNR : - ADR : - IATA\_C : - IATA\_P : - IMDG : - RID : -

**Packaging group**

ADNR : ADR : IATA\_C : IATA\_P : IMDG : RID :

**Environmental hazards**

ADNR : No ADR : No IMDG : Marine Pollutant No IATA\_C : No IATA\_P : No RID : No

**Special precautions for use** No data available

**SECTION 15: REGULATORY INFORMATION**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Safety health and environment regulations/legislation specific for the substance or mixture**

No data available

**Chemical Safety Assessment**

No data available

**SECTION 16: OTHER INFORMATION**

H302 Harmful if swallowed  
H315 Causes skin irritation  
H318 Causes serious eye damage  
H319 Causes serious eye irritation  
H335 May cause respiratory irritation  
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  
Eye Dam. 1 Serious eye damage or eye irritation, Category 1  
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A  
Skin Irrit. 2 Skin corrosion or irritation, Category 2  
STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3  
R22 Harmful if swallowed.  
R36/38 Irritating to eyes and skin.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse. Effects in the aquatic environment.  
N Dangerous for the environment  
Xi Irritant  
Xn Harmful

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

