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

1.1 Product Identifiers

Product Number: M552
Product Name: Clausen Medium
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]

Sensitisation, Skin, (Category 1), H317

2.2 Label elements

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

Pictogram

Signal word: Warning

Hazard Statement(s)

H317: May cause an allergic skin reaction

Precautionary Statement(s)

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.
P333 + P313: IF SKIN irritation or rash occurs: Get medical advice/attention.

2.3 Other Hazards

None
### Composition/Information On Ingredients

#### Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dithionite (Sodium hydrosulfite)</td>
<td>As Per EC Regulation 1272/2008</td>
<td>1.0 - 10.0%</td>
</tr>
<tr>
<td>CAS No. : 7775-14-6</td>
<td>Self-heat. 1; Acute Tox. oral 4</td>
<td></td>
</tr>
<tr>
<td>EC No. : 231-890-0</td>
<td>H251; H302</td>
<td></td>
</tr>
</tbody>
</table>

| Sodium thioglycollate              | As Per EC Regulation 1272/2008                                    | 1.0 - 10.0%         |
| CAS No. : 367-51-1                 | Acute Tox. oral. 3; Skin Sens. 1                                   |                     |
| EC No. : 206-696-4                 | H301; H317                                                        |                     |

| Calcium chloride, anhydrous        | As Per EC Regulation 1272/2008                                    | 0.01 - 0.1%         |
| CAS No. : 10043-52-4               | Eye Irrit. 2A                                                     |                     |
| EC No. : 233-140-8                 | H319                                                             |                     |

| Cobaltous sulphate                 | As Per EC Regulation 1272/2008                                    | 0.001 - 0.01%       |
| CAS No. : 10026-24-1               | Acute Tox. oral 4; Skin Sens. 1; Resp. Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; Aquatic Chronic 1 |   |
| EC No. : 233-334-2                 | H302; H317; H334; H341; H350i; H360F; H410                        |                     |

| Cupric sulphate                    | As Per EC Regulation 1272/2008                                    | 0.001 - 0.01%       |
| CAS No. : 7758-98-7                | Acute Tox. oral 4; Skin Irrit. 2; Eye Irrit. 2A                    |                     |
| EC No. : 231-847-6                 | H302; H315; H319                                                   |                     |

| Ferrous sulphate                   | As Per EC Regulation 1272/2008                                    | 0.001 - 0.01%       |
| CAS No. : 7720-78-7                | Acute Tox. oral 4; Skin Irrit. 2; Eye Irrit. 2A                    |                     |
| EC No. : 231-753-5                 | H302; H315; H319                                                   |                     |
| Index-No : 026-003-00-7            |                                                                  |                     |
| Molecular Formula : FeSO₄           |                                                                  |                     |
### Component Classification

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc sulphate</td>
<td>As Per EC Regulation 1272/2008</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye Dam. 1; Aquatic Chronic 1</td>
<td>H318; H410</td>
</tr>
<tr>
<td></td>
<td>&gt;=0.001 - &lt;=0.01%</td>
<td></td>
</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
Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas, Sodium oxides, Oxides of phosphorus, Potassium oxides, Magnesium oxides, Sulphur oxides

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
Appearance: Cream to yellow coloured homogeneous free flowing powder
Odour: No data available
Odour Threshold: No data available
pH: 6.90 - 7.30
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. 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

**Aspiration hazard**
No data available

11.2 Components

**Sodium dithionate (Sodium hydrosulfite)**

**Acute oral toxicity**
Rat oral LD50: 2500 mg/kg, 7d (ECHA)
(As per OECD Guideline 401)

**Acute Dermal Toxicity**
Rat Dermal LD50: 2000 mg/kg, 15d (ECHA)
(As per OECD Guideline 402)

Rabbit Dermal LD50: >10000 mg/kg

**Repeated dose toxicity; oral**
Rats NOAEL can be expected above the highest dose level tested 53: mg/kg (ECHA)

**Carcinogenicity**
Considered to exert tumour-promoting activity in the rat glandular stomach.

**Acute Potential Health Effects**

**Effect on Skin**
Causes skin irritation. Contact dermatitis may develop in sensitive individuals.

**Effect on Eyes**
Causes eye irritation and possible eye damage.

**Effect on Inhalation**
It can irritate the respiratory tract (nose, throat, lungs) and cause wheezing, and/or shortness of breath.

**Effect on Ingestion**
May be harmful if ingested. It can cause gastrointestinal tract irritation with nausea, abdominal pain, vomiting, and diarrhea.

**Additional Information**
RTECS: JP2100000

**Sodium Thioglycollate**
*Acute oral toxicity*
Rat LD50: 50-200 mg/kg (As per OECD Test Guideline 423)

*Acute dermal toxicity*
Rat LD50: >1000-2000 mg/kg (As per OECD Test Guideline 402)

*Skin irritation*
Rabbit: Slight irritation (As per OECD Test Guideline 404)

*Eye irritation*
Rabbit: Slight irritation (As per OECD Test Guideline 405)

*Sensitization*
Local Lymph Node Assay (LLNA)
Mouse: Positive (As per OECD Test Guideline 429)

*Germ cell mutagenicity*

*Genotoxicity in vivo*
In vivo micronucleus test: Mouse (male & female)
Oral Result: Negative method (As per OECD Test Guideline 474)

*Genotoxicity in vitro*
Ames Test: *Salmonella* Typhimurium
Result: Negative (As per OECD Test Guideline 471)

**Additional information:**
RTECS: AI7700000

**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
Ferrous sulphate
Acute Oral Toxicity
Mouse LD50: 1.520 mg/kg

Additional Information
RTECS: NO8510000
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

Components
Sodium dithionate (Sodium hydrosulfite)
Toxicity to fish
Short term acute toxicity
Leuciscus idus (Golden orfe) LC50: 62.3 mg/L, 96h (ECHA)
(As per DIN 38412, Part 15)
Long term acute toxicity
Danio rerio (Zebrafish) NOEC of >= 316 mg/L, 34d (ECHA)
(As per OECD Guideline 210)
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna STRAUSS LC50 of 98.3 mg test item/L, 48 h, (ECHA)
(As per Standard acute invertebrate toxicity test)
Toxicity to aquatic algae and cyanobacteria
Desmodesmus subspicatus (former name: Scenedesmus subspicatus)
EC10: 81.7 mg/L and EC50: 206.2 mg/L, 72h (ECHA)
Toxicity to bacteria
Pseudomonas putida EC50 and EC10: 106.5 and 61.6 mg/L, 17h (ECHA)
(As per DIN 38412, Part 8)

Components
Sodium thioglycollate
Toxicity to fish
Oncorhynchus mykiss (rainbow trout) LC50: > 100 mg/L; 96 h
(As per OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates
Daphnia magna (Water flea) EC50: 38 mg/L; 48 h
(As per OECD Test Guideline 202)
Toxicity to algae
Desmodesmus subspicatus (green algae) EC50: > 100 mg/L; 72h
(As per OECD Test Guideline 201)
Toxicity to bacteria
EC50 Activated sludge: 820 mg/L; 0.5 h
(As per 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
Algae IC50 : 3,130 mg/l; 120 h
(As per IUCLID)

Components

Ferrous sulphate
Toxicity to fish
Brook trout (Salvelinus fontinalis) LC 50: 0.41 mg/l ; 96h

Toxicity to daphnia and other aquatic invertebrates
Water flea (Daphnia magna) EC 50:6.15 mg/l;48h

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

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 : ADR : IATA_C : IATA_P : IMDG : RID :

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

H251 Self-heating; may catch fire
H301 Toxic if swallowed
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
H341 Suspected of causing genetic defects
H350i  May cause cancer by inhalation
H360F  May damage fertility
H410  Very toxic to aquatic life with long lasting effects
Acute Tox.oral 4  Acute toxicity, oral, Category 4
Acute Tox.oral. 3  Acute toxicity, oral, Category 3
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
Repr. 1B  Reproductive toxicity, Category 1B
Resp. Sens. 1  Sensitisation, respiratory, Category 1
Self-heat. 1  Self-heating substances and mixtures, Category 1
Skin Irrit. 2  Skin corrosion or irritation, Category 2
Skin Sens. 1  Sensitisation, Skin, Category 1

Further Information

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