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	C - 40,Road No.21Y,MIDC, Wagle Industrial Area, Thane(W), - 400 604, India		
Tel. No.	+91-22- 6147 1919/6116 9797	Fax No.	: +91-22- 61471920
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

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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

3 Composition/Information On Ingredients

3.2 Mixture

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

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

Component		Classification	Concentration
Calcium chloride, anhydrous			
CAS No. : EC No. :	10043-52-4 233-140-8	**As Per EC Regulation 1272/2008** Eye Irrit. 2A H319	>=0.01 - <=0.1%

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

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

Component		Classification	Concentration
Ferrous sulphate			
CAS No. : EC No. : Index-No : Molecular Formula :	7720-78-7 231-753-5 026-003-00-7 $FeSO_4$	**As Per EC Regulation 1272/2008** Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319	>=0.001 - <=0.01%

Component		Classification	Concentration
Zinc sulphate			
CAS No. : EC No. :	7446-19-7 231-793-3	**As Per EC Regulation 1272/2008** Eye Dam. 1; Aquatic Chronic 1 H318; H410	>=0.001 - <=0.01%

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.

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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 saftey 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

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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/Land 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
AlgaeIC50 : 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

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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 : 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

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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

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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