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Safety data sheet(SDS)

According to Regulation (EC) No.1907/2006

Revision: 00000

Date of Revision: 05.01.2017

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

1.1 Product Identifiers

Product Number PT128

Product Name Murashige & Skoog Medium

w/ CaCl₂;

w/o NH<sub>4</sub>NO<sub>3</sub>, KNO<sub>3</sub>, Vitamins, Sucrose & Agar

REACH Registration Number Reach registration number is not available for this mixture. According

to REACH regulation EC 1907/2006 this product is exempted from registration. The annual tonnage does not require a REACH registration

or it is envisaged for a later registration deadline.

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

**1.2.1** Relevant identified uses Laboratory chemicals, Manufacture of substances

**1.2.2** Uses advised against No data available

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]

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)

H319 Causes serious eye irritation

Precautionary Statement(s)

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.

## 2.3 Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 3 Composition/Information On Ingredients

## 3.2 Mixture

Component		Classification	Concentration
Calcium chloride,anhydrous			
CAS No.:	10043-52-4	As Per EC Regulation 1272/2008	>=40 - <=50%
EC No.:	233-140-8	Eye Irrit. 2A H319	

Component Manganese sulphate		Classification	Concentration
CAS No.:	10034-96-5	As Per EC Regulation 1272/2008	>=1 - <=3%
EC No.:	232-089-9	STOT RE 2; Aquatic Chronic 2 H373;	
Index-No :	025-003-00-4	H411	

Component		Classification	Concentration
Boric acid			
CAS No.:	10043-35-3	As Per EC Regulation 1272/2008	>=0.7 - <=0.9%
EC No.:	233-139-2	Repr.Tox. 1A, 1B H360	
Index-No :	005-007-00-2		

Component		Classification	Concentration
Potassium iodide	e		
CAS No.:	7681-11-0	As Per EC Regulation 1272/2008	>=0.05 - <=0.2%
EC No. :	231-659-4	Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit. 2A H302; H315; H319	

Component		Classification	Concentration
Zinc sulphate, heptahydrate			
CAS No.:	7446-20-0	As Per EC Regulation 1272/2008	>=1 - <=2%
EC No.:	231-793-3	Acute Tox.oral 4; Eye Dam. 1; Aquatic	

Index-No :	030-006-00-9	Chronic 1 H302; H318; H410	

Component		Classification	Concentration
Copper sulphate pentahydrate			
CAS No.:	7758-99-8	As Per EC Regulation 1272/2008	>=0.002 -
		H302; H315; H319; H410	<=0.004%

Component		Classification	Concentration
Cobalt chloride, 6H2O			
CAS No.:	7791-13-1	As Per EC Regulation 1272/2008	>=0.002 -
EC No.:	231-589-4	Acute Tox.oral 4; Skin Sens. 1; Resp.	<=0.004%
Index-No :	027-004-00-5	Sens. 1; Muta. 2; Carc. 1B; Repr. 1B;	
		Aquatic Chronic 1 H302; H317; H334;	
		H341; H350i; H360F; H410	

For the full text of the H-Statements and classification mentioned in this Section, see Section 16

#### 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

Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

## 4.3 Indication of immediate medical attention and special treatment needed

Treat symptomatically.

## 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

Magnesium oxides, Sulphur oxides, Sodium oxides, Iron oxides, Calcium Oxide, Cobalt oxides, Copper oxides, Manganese oxides,, Molybdenum oxides, Oxides of Phosphorus, Potassium oxides, Zinc oxides

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

Cool closed containers exposed to fire with water spray.

#### 5.4 Further information

Wear self-contained breathing apparatus for firefighting if necessary.

### 6 Accidental Release Measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personnel protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal. Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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 formation of dust and aerosols. Wear protective gloves and eye/face protection. Use only in well ventilated areas. Keep away from heat, sparks and open flame.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool/well-ventilated place. Storage class (TRGS 510): Oxidizing Solids

**Recommended Storage Temperature**: 2 - 8°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

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks, immediately after handling the products and at the end of workday.

## Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Have eye-washing facilities readily available where eye contact can occur.

## 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 particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Environment exposure controls**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9 Physical and chemical properties

## 9.1 Information on basic physical and chemical properties

Appearance White to off-white, homogenous powder

Odour No data available
Odour Threshold No data available

pH 3.5 - 4.5

Melting/freezing pointNo data availableInitial boiling point and boiling rangeNo data availableFlash pointNo data available

Upper/lower flammability or explosive limits

Evaporation rate
Flammability (Solid, gas)

Vapour pressure

Relative density

Water Solubility

Autoignition Temperature

No data available

Decomposition Temperature

Viscosity

No data available

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

Stable under recommended storage conditions.

#### 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

Hazardous decomposition products formed under fire conditions - Nitrogen oxides(NOx), Sulphur oxides, Oxides of phosphorus,. Potassium oxides, Magnesium oxide, Cobalt/cobalt oxides, Calcium oxide, Copper oxides

### 11 Toxicological Information

## 11.1 Information on toxicological effects

#### Acute toxicity

No data available

Remarks: No data available

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 - repeated exposure

No data available

#### Aspiration hazard

No data available

### **Additional Information**

RTECS: NotApplicable

### 12 Ecological Information

#### 12.1 Toxicity

No data available

## 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) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

#### 13 Disposal Considerations

#### 13.1 Waste treatments methods

#### Product

Dispose of as unused product.

#### 13.2 Contaminated packaging

Burn in a chemical incinerator equipped with an afterburner and srcubber but exert extra care in igniting as this material is highly flammable. Contact a licenced professional waste disposal service to dispose off this material.

### 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

ADR: No IMDG: Marine Pollutant: No IATA C: No

14.6 Special precautions for use

No data available

# 15 Regulatory Information

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

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

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#### mixture

## 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

#### 16 Other information

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
H360	May damage fertility or the unborn child
H360F	May damage fertility
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects
H411	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
Aquatic Chronic 2	Hazardous to the aquatic environment, long term hazard, Category 2
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
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 RE 2	Specific target organ toxicity, repeated exposure, Category 2

## **Further Information**

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