

Name of the Product : **MRS Broth, Modified (Lactobacillus Heteroferm Screen Broth)**
 Code No. : **M1164**
 Section 1 : **Chemical Identification**
 Code No. : M1164
 Name of the Product : MRS Broth, Modified (Lactobacillus Heteroferm Screen Broth)
 Produced by : HiMedia Laboratories Pvt. Ltd.
 Address : 23, Vadhani Indl. Estate, LBS Marg, Mumbai 400 086, India.
 Tel. No. : 2500 0970, 2500 1607 Fax No. 022 2500 2468

Section 2 : **Composition**

Ingredients	Grams/Litre	Ingredients	Grams/Litre
Dextrose	20.00	Proteose peptone	10.00
Yeast extract	5.00	Sodium acetate	5.00
*2-Phenylethyl alcohol	3.00	*Ammonium citrate	2.00
Dipotassium phosphate	2.00	Magnesium sulphate	0.10
*Manganese sulphate	0.05	Bromo cresol green	0.04
*Cycloheximide	0.004		
Final pH (at 25°C) 4.3±0.2			

* Irritant / Harmful / Dangerous for the environment / Toxic material



2-Phenylethyl alcohol
 CAS No. : 60-12-8
 R : 21/22-36/38 S : 26-28.1-36/37
 RTECS : SG 7175000



Ammonium citrate
 CAS No. : 3458-72-8
 R : 36/37/38 S : 26-36



Manganese sulphate
 CAS No. : 10034-96-5
 R : 48/20/22-51/53 S : 22-61
 RTECS : OP 0893500



Cycloheximide
 CAS No. : 66-81-9
 R : 61-28-51/53-68 S : 53-45-61
 RTECS : MA 4375000

Section 3 : **Hazards Identification**



Hazard : This symbol designates substances which may have an irritant effect on skin, eyes and respiratory organs.
 Caution : Do not breathe vapours and avoid contact with skin and eyes.



Hazard : Inhalation and ingestion of, or skin penetration by these substances is harmful to one's health. Non-recurring, recurring or lengthy exposure to these substances may result in irreversible damage.
 Caution : Avoid contact with the human body, including inhalation of the vapours and in cases of malaise consult a doctor.



Hazard : The substances are very hazardous to health when breathed, swallowed or in contact with the skin and may even lead to death. Non-recurring, recurring or lengthy exposure to these substances may result in irreversible damage.
 Caution : Avoid contact with the human body, and immediately consult a doctor in cases of malaise.



Hazard : Substances which are harmful to the aquatic (aquatic organisms, waters), as well as the non-aquatic environment (fauna, flora, atmosphere) or which have a detrimental effect at longer term.
Caution : Avoid release to the environment.

Section 4 : **First - Aid Measures**

In case of swallowing, wash out mouth with water provided person is conscious. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. In case of inhalation, remove to fresh air. If breathing becomes difficult, call physician. In case of contact with eyes, wash with copious amounts of water for at least 15 minutes. Assure adequate washing by separating the eyelids with fingers. In serious conditions, call a physician, show the container or label.

Section 5 : **Fire Fighting Measures**

Extinguishing Media. Water spray.

Carbon dioxide, dry chemical powder or appropriate foam. Special fire-fighting procedures. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Unusual fire and explosions hazards Emits toxic fumes under fire conditions.

Section 6 : **Accidental Release Measures**

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 : **Handling and Storage**

Handling - Refer to Section 8

Storage - Store below 8°C

Section 8 : **Exposure Controls / Personal Protection**

Wear appropriate Niosh/Msha-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Mechanical exhaust required.

Section 9 : **Physical and Chemical Properties**

Appearance : Homogeneous powder

Colour : Light yellow to bluish grey

Section 10 : **Stability and Reactivity**

Stability : Product is stable if stored as per the conditions specified under storage of Section No. 7. Product loses its potency/performance above 45°C.

Conditions to avoid : Heat and light.

Decomposition products : if product is decomposed toxic fumes of carbon monoxide and carbon dioxide may evolve. Hazardous polymerization will not occur.

Section 11 : **Toxicological Information**

Acute Effects : May be harmful if swallowed.

Exposure can cause : Severe inflammation of the colon. Appears to penetrate well into bone and central nervous system Possess neuromuscular blocking activity Stomach pains, vomiting, diarrhoea. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Target organ(s) : G.I. System

Exposure can cause : Stomach pains, vomiting, diarrhoea. Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

RTECS No. : SG 7175000 OP 0893500 MA 4375000

For complete information RTECS may be referred.

Section 12 : **Ecological Information**
Data not available

Section 13 : **Disposal Considerations**
On completion of work all used or unusable preparations of this product and derivatives thereof are to be disposed off by autoclaving and/or by incineration. Dispose off waste in accordance with all applicable Federal, State and local laws.

Section 14 : **Transport Information**
UN No. : Not applicable.

Section 15 : **Regulatory Information**

Risk Phrases : Harmful in contact with skin and if swallowed
Risk Phrases : Irritating to eyes and skin
Risk Phrases : Irritating to eyes, respiratory system and skin
Risk Phrases : Harmful : danger of serious damage to health by prolonged exposure through inhalation and if swallowed
Risk Phrases : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Risk Phrases : May cause harm to the unborn child
Risk Phrases : Very toxic if swallowed
Risk Phrases : Possible risk of irreversible effects
Safety Phrases : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
Safety Phrases : After contact with skin, wash immediately with plenty of soap-suds
1. water
Safety Phrases : Wear suitable protective clothing and gloves
Safety Phrases : Wear suitable protective clothing
Safety Phrases : Do not breathe dust
Safety Phrases : Avoid release to the environment. Refer to special instructions/Safety data sheets
Safety Phrases : Avoid exposure-obtain special instructions before use.
Safety Phrases: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)



Significance of signs : This symbol designates substances which may have an irritant effect on skin, eyes and respiratory organs.



Significance of signs : Inhalation and ingestion of, or skin penetration by these substances is harmful to one's health. Non-recurring, recurring or lengthy exposure to these substances may result in irreversible damage.



Significance of signs : The substances are very hazardous to health when breathed, swallowed or in contact with the skin and may even lead to death. Non-recurring, recurring or lengthy exposure to these substances may result in irreversible damage.



Significance of signs : Substances which are harmful to the aquatic (aquatic organisms, waters), as well as the non-aquatic environment (fauna, flora, atmosphere) or which have a detrimental effect at longer term.

Section 16 : **Other Information**

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.