Technical Information

Liver Meat Infusion Agar

Product Code: DM 2206

Application: - Liver Meat Infusion Agar is used for the enumeration of sulphite reducing Clostridia and *Clostridium perfringens* in water and milk.

Composition**

Ingredients	Gms / Litre
Meat liver infusion powder	20.000
Dextrose	0.750
Starch	0.750
Sodium sulphite	1.200
Ferric ammonium citrate	0.500
Sodium carbonate	0.670
Agar	11.000
Final pH (at 25°C)	7.6±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Anaerobic bacteria live in an oxygen-free environment. Some anaerobic bacteria actually die if oxygen is present, while others fail to grow and multiply (1).

In the medium the presence of meat liver infusion in the medium provides adequate degree of anaerobiosis besides provision of rich supply of nutrients, enabling even strict and fastidious anaerobes to grow well. *Clostridium* species reduce sulphite present in the medium to hydrogen sulphide (H_2S), which is indicated by blackening due to the presence of iron salt. The agar medium is inoculated either by pour plate method or by surface spreading methods.

Methodology

Suspend 34.87 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Medium can be used in tubes or plates as desired.

Quality Control

Appearance
Light yellow to light brown homogeneous free flowing powder

Gelling
Firm, comparable with 1.1% Agar gel

Colour and Clarity
Brown coloured opalascent gel with suspended particles forms in Petri plates.

Reaction
Reaction of 3.48% w/v aqueous solution at 25°C. pH : 7.6±0.2

pH Range
7.40-7.80

Cultural Response
DM 2206: Cultural characteristics observed under anaerobic condition, after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	H_2S
Cultural Response				
Clostridium perfringens ATCC 12924	50-100	luxuriant	>=50%	positive
Clostridium tetani ATCC 10779	50-100	luxuriant	>=50%	positive
Escherichia coli ATCC 25922	50-100	luxuriant	>=50%	negative
Proteus mirabilis ATCC 25933	50-100	luxuriant	>=50%	negative or weakly positive
Clostridium botulinum ATCC 25763	50-100	luxuriant	>=50%	positive
Bacteroides vulgatus ATCC 8482	50-100	luxuriant	>=50%	negative

Storage and Shelf Life

Dried Media: Store below 10-30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.
Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Alcamo E. I. , 2001, Fundamentals of Microbiology, 6th Ed., Jones and Bartlett Publishers

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performance parameters.