

## Technical Information

### Liver Meat Agar

**Product Code: DM 2001**

**Application:** - Liver Meat Agar is recommended for cultivation of fastidious anaerobic microorganisms.

### 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
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). Meat liver base supplies adequate degree of anaerobiosis. It is also rich source of growth nutrients, which enables even the strict and fastidious anaerobes to grow well.

Some anaerobes (e.g. certain *Clostridium* species) reduce the sulphite present in the medium to hydrogen sulphide (H<sub>2</sub>S) which is indicated by the blackening of colonies due to presence of ferric ammonium citrate. Inoculation can be performed by the pour plate method or by surface smearing

### Methodology

Suspend 34.2 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

### 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 opalescent gel with suspended particles forms in Petri plates.

#### Reaction

Reaction of 3.42% w/v aqueous solution at 25°C. pH : 7.6±0.2

#### pH Range

7.40-7.80

#### Cultural Response

DM 2001: Cultural characteristics observed under anaerobic condition, after an incubation at 35-37°C for 18-48 hours.



Dehydrated Culture Media  
Bases / Media Supplements

Organism	Inoculum (CFU)	Growth	Recovery	H <sub>2</sub> S
<i>Clostridium perfringens</i> ATCC 12924	50-100	luxuriant	>=50%	positive
<i>Clostridium tetani</i> ATCC 10779	50-100	luxuriant	>=50%	positive
<i>Escherichia coli</i> ATCC 25922	50-100	luxuriant	>=50%	negative
<i>Proteus mirabilis</i> ATCC 25933	50-100	luxuriant	>=50%	negative or weakly positive
<i>Clostridium botulinum</i> ATCC 25763	50-100	luxuriant	>=50%	negative
<i>Bacteroides vulgatus</i> ATCC 8482	50-100	good-luxuriant	>=50%	positive

## Storage and Shelf Life

**Dried Media:** Store below 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.
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