

# TM 767 – LIVER MEAT INFUSION AGAR

#### **INTENDED USE**

For enumeration of sulphite reducing Clostridia and Clostridium perfringens in water and milk.

### PRODUCT SUMMARY AND EXPLANATION

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

### **COMPOSITION**

Ingredients	Gms / Ltr		
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		

## **PRINCIPLE**

This medium contains Meat liver infusion which 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.

### **INSTRUCTION FOR USE**

- Dissolve 34.87 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15psi pressure (121°C) for 15 minutes.
- Medium can be used in tubes or plates as desired.

### **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Light yellow to light brown homogeneous free flowing powder.

**Appearance of prepared medium**: Brown coloured opalescent gel with suspended particles forms in Petri plates.

**pH (at 25°C)** : 7.6 ± 0.2

#### **INTERPRETATION**

Cultural characteristics observed under anaerobic condition after incubation.









Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	H₂S	Incubation Temperature	Incubation Period
Clostridium perfringens	12924	50-100	Luxuriant	>=70%	Positive	35-37°C	18-48 Hours
Proteus mirabilis	25933	50-100	Luxuriant	>=70%	Negative or weakly positive	35-37°C	18-48 Hours
Clostridium tetani	10779	50-100	Luxuriant	>=70%	Positive	35-37°C	18-48 Hours
Clostridium botulinum	25763	50-100	Luxuriant	>=70%	Positive	35-37°C	18-48 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Negative	35-37°C	18-48 Hours
Bacteroides vulgatus	8482	50-100	Good- luxuriant	>=0%	Negative	35-37°C	18-48 Hours

## **PACKAGING:**

In pack size of 500 gm bottles.

## **STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

### **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### **REFERENCES**

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



































**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only

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