

TM 2147 – LIVER MEAT AGAR, MODIFIED

INTENDED USE

For cultivation of fastidious anaerobic microorganisms.

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. *Clostridium* is a large genus of gram-positive spore-bearing anaerobes. They are normally present in soil, some are responsible for human and animal diseases and others are associated with food spoilage. The present formulation is a modification, which supports the growth of many spore forming and non-spore forming strict anaerobes.

COMPOSITION

Ingredients	Gms / Ltr	
Meat liver infusion Base	20.000	
Dextrose (Glucose)	0.750	
Starch	0.750	
Agar	11.000	

PRINCIPLE

This medium contains Meat liver infusion Base which contains growth nutrients such as nitrogen, vitamins, minerals and amino acids. It provides adequate degree of anaerobiosis and is also rich source of growth nutrients, which enables even the strict and fastidious anaerobes to grow well. Dextrose is the source of fermentable carbohydrate.

INSTRUCTION FOR USE

- Dissolve 32.5 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.

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 Incubation Incubation Temperature Period



PRODUCT DATA SHEET



Clostridium perfringens	12924	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Proteus mirabilis	25933	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Clostridium tetani	10779	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Clostridium botulinum	25763	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-48 Hours
Bacteroides vulgatus	8482	50-100	Luxuriant	>=70%	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.

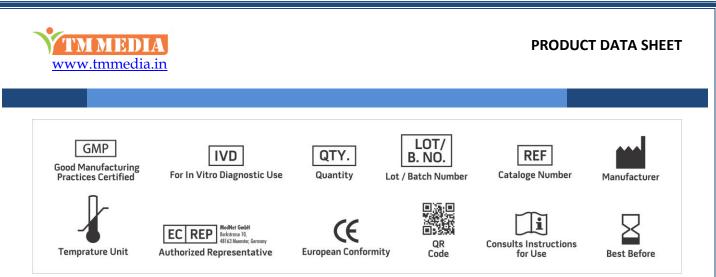
DISPOSAL

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
- 2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
- 5. Subba Rao N. S., 1977, Soil Microorganisms and Plant Growth, Oxford and IBH Publishing Co., New Delhi.





NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019

