

# TM 766 – LIVER MEAT GLUCOSE CYSTEINE BROTH

### **INTENDED USE**

For cultivation of fastidious anaerobes.

# 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. Liver Meat Glucose Cysteine Broth is recommended for the cultivation of fastidious anaerobic organisms.

# **COMPOSITION**

Ingredients	Gms / Ltr	
Liver meat Base	29.500	
Glucose	2.000	
L-Cysteine hydrochloride	0.500	

# **PRINCIPLE**

This medium contains Liver Meat Base which is a rich source of vitamins, the haem group and other nutrients that support the growth of strict and nutritionally fastidious anaerobes. Besides, it also provides sufficient degree of anaerobiosis in the medium. L-Cysteine hydrochloride has a dual function in that it acts as a nutrient and the sulphydral group present in it helps to create anaerobic conditions. Glucose provides source of energy.

# **INSTRUCTION FOR USE**

- Dissolve 32.0 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense into tubes or flasks as desired and Sterilize by autoclaving at 15psi pressure (121°C) for 15 minutes.

# **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Yellow to brownish yellow homogeneous free flowing powder.

**Appearance of prepared medium**: Amber coloured clear to slightly opalescent solution.

**pH (at 25°C)** :  $7.4 \pm 0.2$ 

### **INTERPRETATION**

Cultural characteristics observed under anaerobic condition after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Bacteroides vulgatus	8482	50-100	Luxuriant	35-37°C	24-48 Hours











Clostridium botulinum	25763	50-100	Luxuriant	35-37°C	24-48 Hours
Clostridium perfringens	12924	50-100	Luxuriant	35-37°C	24-48 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.

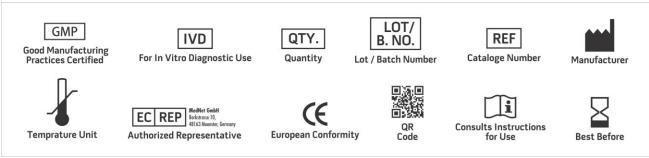
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### **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.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only
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