

TM 2409 - UNIVERSAL FASTIDIOUS CULTURE BROTH

INTENDED USE

For the cultivation of fastidious microorganisms when enriched with blood.

PRODUCT SUMMARY AND EXPLANATION

Universal Fastidious Culture Broth is a basic culture media for cultivation of fastidious organisms by enriching the basal medium with blood. It is non-selective media useful in routine cultivation of microorganisms. It can be used for the cultivation and enumeration of bacteria which are not particularly fastidious. Addition of different biological fluids such as horse or sheep blood, serum, egg yolk etc. makes it suitable for the cultivation of related fastidious organisms.

COMPOSITION

Ingredients	Gms / Ltr	
Meat Peptone	5.000	
Gelatin peptone	5.000	
Casein Peptone	3.500	
Tryptone	3.500	
Yeast extract	3.000	
Sodium chloride	5.000	

PRINCIPLE

Meat Peptone, gelatin peptone, tryptone, Casein Peptone and yeast extract provide the necessary nitrogen, carbon compounds, long chain amino acids, vitamins and also some trace ingredients necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 25 grams in 1000ml purified / distilled water.
- Heat to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent solution.
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics was observed after an incubation.

Microorganism	ATCC	lnoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Streptococcus pyogenes	19615	50 -100	Luxuriant	30-35°C	18-24 Hours

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Staphylococcus aureus subsp. aureus	25923	50 -100	Luxuriant	30-35°C	18-24 Hours
Escherichia coli	25922	50 -100	Luxuriant	30-35°C	18-24 Hours
Enterococcus faecalis	29212	50 -100	Luxuriant	30-35°C	18-24 Hours
Pseudomonas aeruginosa	27853	50 -100	Luxuriant	30-35°C	18-24 Hours
Shigella flexneri	12022	50 -100	Luxuriant	30-35°C	18-24 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.

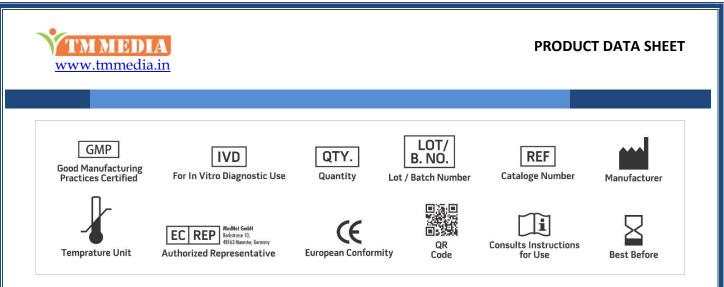
DISPOSAL

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

REFERENCES

- 1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
- 2. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington,
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 3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 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.
- 5. 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.
- 6. Subba Rao N. S., 1977, Soil Microorganisms and Plant Growth, Oxford and IBH Publishing Co., New Delhi.
- 7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.





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

