

TM 2241 - MEAT EXTRACT BROTH

INTENDED USE

For routine cultivation of non-fastidious bacteria.

PRODUCT SUMMARY AND EXPLANATION

The majority of organisms to be studied in medical bacteriology are either pathogens or commensals of the human body, and in order to obtain suitable growth the artificial culture medium should provide nutrients and a pH (about 7.2) approximating to those of the tissues and body fluids. For routine purposes many of these nutrients are supplied by aqueous extracts of Beef extract and peptone, which is a product of the digestion of protein. Meat extract Broth can be used as a general-purpose nutrient medium and is also recommended for preparation of pure culture of *Candida* species for carrying out fermentation studies.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Beef extract	3.000
Sodium chloride	5.000

PRINCIPLE

Meat extract Broth is a non-selective nutrient medium containing Beef extract and peptone as a source of nitrogen and carbon source, long chain amino acids, vitamins and other essential nutrients. Sodium chloride as a source of electrolytes.

INSTRUCTION FOR USE

- Dissolve 18.0 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes or flasks or as desired.
- 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 : Yellow coloured, clear solution without any haziness in tubes.

pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Candida albicans</i>	10231	10-100	Luxuriant	35-37°C	24-48 Hours



<i>Escherichia coli</i>	25922	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Salmonella</i> Typhi	6539	50-100	Luxuriant	35-37°C	24-48 Hours
<i>Staphylococcus aureus</i> subsp. <i>aureus</i>	25923	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

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4. Finegold S. M. and Baron E. J., (Ed.), Bailey and Scott's Diagnostic Microbiology, 1986, 7th Edition, The C.V. Mosby Company, St. Louis.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
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7. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
8. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
9. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
10. 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**
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