

TM 331 – POTATO DEXTROSE BROTH

INTENDED USE

For cultivation and enumeration of yeasts and molds.

PRODUCT SUMMARY AND EXPLANATION

Potato Dextrose Broth is recommended by APHA and F.D.A. for plate counts of yeasts and moulds in the examination of foods and dairy products. Potato Dextrose Broth is also used for stimulating sporulation, for maintaining stock cultures of certain dermatophytes and for differentiation of typical varieties of dermatophytes on the basis of pigment production.

COMPOSITION

Ingredients	Gms / Ltr
Potatoes, infusion from	200.000
Dextrose (Glucose)	20.000

PRINCIPLE

This medium consists of Potato infusion and dextrose that promote luxuriant fungal growth. Adjusting the pH of the medium by tartaric acid to 3.5, inhibits the bacterial growth. Heating the medium after acidification should be avoided.

INSTRUCTION FOR USE

- Dissolve 24.0 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well before dispensing. In specific work, when pH 3.5 is required, acidify the medium with sterile 10% tartaric acid. The amount of acid required for 100 ml. of sterile, cooled medium is approximately 1 ml. Do not heat the medium after addition of the acid.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Off-white to yellow homogeneous free flowing powder.
- Appearance of prepared medium** : Light amber coloured clear to slightly opalescent solution in tubes.
- pH (at 25°C)** : 5.1 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Ascospore formation	Incubation Temperature	Incubation Period
<i>Candida albicans</i>	10231	10-100	Luxuriant	Negative	25-30°C	4-5 Days



<i>Saccharomyces cerevisiae</i>	9763	10-100	Luxuriant	Positive	25-30°C	4-5 Days
<i>Aspergillus niger</i>	16404	10-100	Luxuriant	Negative	25-30°C	4-5 Days

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

- Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
- FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
- Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
- MacFaddin J. F., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
Revision: 08 Nov., 2019