Potato Dextrose Broth

Intended Use

Potato Dextrose Broth is used for the cultivation and enumeration of Yeasts and Moulds from dairy and food products.

Summary

Potato Dextrose Broth is recommended by APHA and FDA 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.

Principle

Potato infusion and dextrose promote luxuriant fungal growth.

Formula*

Ingredientsg/LPotato Starch (Approximate4.0200 g infusion from potatoes)20.0Dextrose20.0Final pH (at 25°C) 5.1 ± 0.2

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Food and dairy sample

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines.

For food and dairy samples, follow appropriate techniques for handling specimens as per established guidelines. For water samples, follow appropriate techniques for handling specimens as per established guidelines and local standards.

Specimens should be obtained before antimicrobial agents have been administered.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

- 1. Suspend 24.00 g of the powder in 1000 mL purified / distilled water.
- 2. Mix thoroughly.
- 3. Warm slightly to dissolve the powder completely.
- 4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous, coarse free flowing powder.

Prepared Appearance: Light yellow to amber coloured, clear to slightly opalescent solution.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 20°C-25°C for <=5 days.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤100 cfu of appropriate microorganism at 20°C-25°C.

Organism (ATCC) Growth
Aspergillus brasiliensis WLRI 034(120) (16404) Good
Candida albicans 3147 (10231) Good
Saccharomyces cerevisiae NRRL Y-567 (9763) Good

^{*}Adjusted to suit performance parameters.

Interpretation of Results

Observe cultures for surface growth and pellicle formation.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

- 1. Directions
- 2. Storage
- 3. Expiry

Precautions/Limitations

Heating the medium after acidification should be avoided.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

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

Product Presentation:

Cat No.	Product description	Pack Size
201160290100	Dehydrated Culture Media	100 g
201160290500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.