

Potato Dextrose Broth for Trichoderma

Intended Use

Potato Dextrose Broth for Trichoderma is recommended for cultivation and enumeration of *Trichoderma* species.

Summary

The members of genus *Trichoderma* are free-living fungi that are common in soil and root ecosystems. They are opportunistic, a virulent plant symbiont, as well as being parasites of other fungi. Use of agar media has a useful function in a preliminary selection of individual antagonists for subsequent testing in pathogen management. Studies were conducted for the use of various culture media for isolation and growth of *Trichoderma* spp. Potato Dextrose broth medium was found suitable for growth of *Trichoderma* species. Potato Dextrose broth is also recommended by USP, BP, EP and JP for growth of fungi.

Principle

Potato infusion and dextrose provide nutrients for luxuriant growth of fungi.

Formula*

Ingredientsg/LPotato infusion from 200.0 g4.0Dextrose20.0Final pH (at 25°C) 5.6 ± 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.

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 coloured, homogenous, free flowing powder.

Prepared Appearance: Light vellow 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 20-25°C for 48 hours.

Organism (ATCC) Growth
Trichoderma viride (13631) Good

^{*}Adjusted to suit performance parameters.

Performance and Evaluation

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

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

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
201160300500	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.