

Potato Dextrose Agar for Trichoderma

Intended Use

Potato Dextrose Agar 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, avirulent plant symbionts, 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 Agar (PDA) medium was found best for all types of growth of *Trichoderma* species. Potato Dextrose Agar is also used for stimulating sporulation, for maintaining stock cultures of fungi. It 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. Acidifying the medium by lowering the pH to 3.5 with sterile tartaric acid inhibits bacterial growth.

Formula*

Ingredients	g/L
Potato Infusion from 200.0 g	4.0
Dextrose	20.0
Agar	15.0
Final pH (at 25°C)	5.6 ± 0.2

*Adjusted to suit performance parameters

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 39.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Warm slightly to dissolve the powder completely. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Mix well before dispensing.
5. When pH 3.5 is required, cool the base to 45°C and aseptically add an appropriate amount of sterile 10% tartaric acid (approximately 1 mL in 1000 mL of medium) to each litre of the medium and mix well.
6. Do not reheat the medium after addition of acid.

Quality Control

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

Prepared Appearance: Light yellow to amber coloured, clear to slightly opalescent gel forms in petridishes.

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 for 72 hours.

Organism (ATCC)
Trichoderma viride (13631)

Growth
Good

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. British Pharmacopoeia, 2011, The Stationery Office British Pharmacopoeia
2. European Pharmacopoeia, 2011, EDQM.
3. The United States Pharmacopoeia, 2011, The United States Pharmacopoeial Convention, Rockville, MD. Japanese Pharmacopoeia, 2008
4. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201160270500	Dehydrated Culture Media	500 g
201160272500	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.
