Potato Dextrose Agar

Intended Use
Potato Dextrose Agar is used for isolation and enumeration of Yeasts and Moulds from dairy and other food products.

Summary
Potato Dextrose Agar is recommended by APHA and FDA for plate counts of yeasts and moulds in the examination of foods and dairy products. Potato Dextrose Agar 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. 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 Starch (Approximate 200g Infusion from Potatoes)	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.

Type of Specimen
Food and dairy samples; Water samples

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. Boil with frequent agitation to dissolve the powder completely.
3. 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 100 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 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 and growth is observed after an incubation at 20°C-25°C tor <5 days for fungi.
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**
Candida albicans 3147 (10231)	Good
Saccharomyces cerevisiae NRRL Y-567 (9763)	Good
Aspergillus brasiliensis WLRI 034(120) (16404)	Good

Note: For Good growth - Growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Interpretation of Results

1. Count the number of colonies and express as colony forming units (cfu) per g or mL of sample, taking into account the applicable dilution factor.
2. If duplicate plates were set up, express the average of the two plates in terms of number of micro-organisms per g or mL of sample.
3. Examine all cultures at least weekly for fungal growth and preserve for at least 4-6 weeks before being reported as negative.

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

1. Heating the medium after acidification hydrolyzes the agar and may destroy the gelling properties.
2. This medium is not a primary isolation medium. Direct inoculation of specimens will give wrong results.
3. For proper identification of yeasts and moulds, microscopic examination and evaluation of morphological structures may be required.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Warranty

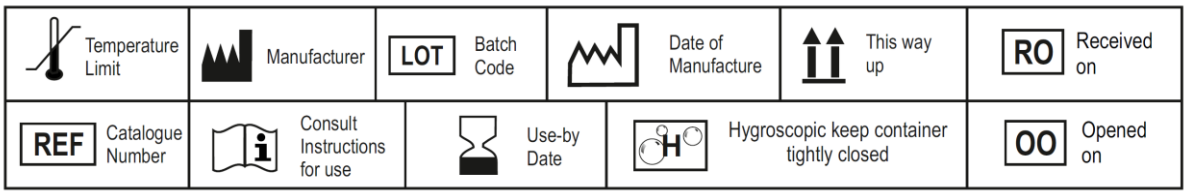
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

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
201160260100	Dehydrated Culture Media	100 g
201160260500	Dehydrated Culture Media	500 g
201160262500	Dehydrated Culture Media	2.5 k
201160265000	Dehydrated Culture Media	5 k



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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.