Instructions For Use
ENGLISH

Potato Dextrose Agar

Medium for the cultivation of fungi, according to USP/EP/JP.

DESCRIPTION

Potato Dextrose Agar is a medium used for the identification, cultivation and enumeration of yeasts and molds from foodstuffs and other materials.

This medium complies with the recommendations of the American Public Health Association for food and the Pharmacopoeial harmonized method for the preparation of the *Aspergillus brasiliensis* test strains.

TYPICAL FORMULA	(g/l)
Potato Infusion (from 200 g of potatoes)	4.0
Dextrose	20.0
Agar	17.0
Final pH 5.6 ± 0.2 at 25°C	

METHOD PRINCIPLE

Potato infusion and dextrose support luxuriant growth of fungi encouraging mould sporulation and pigment production. Agar is the solidifying agent.

PREPARATION

Dehydrated medium	Suspend 42 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes. Note: if the medium is to be used for fungal counts, it can be desirable to suppress bacterial growth. This can be done by adding 1 ml of lactic acid 10% to each 100 ml of sterilized medium at 50°C in order to acidify the pH to approximately 3.5.
Medium in bottles	Melt the content of the bottle in a water bath at 100°C (loosing the cap partially removed) until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

TEST PROCEDURE

Inoculate the medium by the pour-plate method or by spread/streak technique.
Incubate aerobically at 20-25°C for 5-7 days or at 25-30°C for 18-48 h.

Experimental procedure depends on the purpose for which the medium is used.

Tubed slants are used primarily for the cultivation and maintenance of pure cultures. They should be inoculated with an inoculating loop and incubated under the same conditions as the plated medium.

INTERPRETING RESULTS

Examine the medium for fungal growth and colony morphology.

APPEARANCE

Dehydrated medium: free-flowing, homogeneous, light beige.
Prepared medium: slightly opalescent, light amber.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed. Store bottles, tubes and prepared plates at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

Dehydrated medium: 4 years.
Medium in bottles: 2 years.
Medium in tubes: 1 year.
90 mm ready-to-use plates: 6 months.

QUALITY CONTROL

The medium is inoculated with the microbial strains indicated in the QC table.
Inoculum for productivity: 50-100 CFU.
Inoculum for selectivity: 10^4-10^6 CFU.
Incubation conditions: 2-5 days at 20-25°C.

QC Table.

Microorganism		Growth
Aspergillus brasiliensis	ATCC® 16404	Good
Candida albicans	ATCC® 10231	Good
Saccharomyces cerevisiae	ATCC® 9763	Good

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

1. European Pharmacopoeia 6.5 (2009) 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms.
2. United States Pharmacopoeia 32 NF 27 (2009) <62> Microbiological examination of non-sterile products: Test for specified microorganisms.
3. Japanese Pharmacopoeia 4.05 (2008) Microbiological examination of non-sterile products: Test for specified microorganisms.
4. Davidson, Roth, and Gambrel-Lenarz (2004) In Wehr and Frank (ed.) Standard methods for the microbiological examination of dairy products, 17th ed. American Public Health Association, Washington, D.C.
5. Kornacki and Johnson (2001) In Downes and Ito (ed.) Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington D.C.
6. Beever, R.E. and Bollard, E.G. (1970) The nature of the stimulation of fungal growth by potato extract. J. Gen. Microbiol. 60:273-279.

PRESENTATION		Contents	Ref.
Potato Dextrose Agar	90 mm ready-to-use plates	20 plates	11199
Potato Dextrose Agar	90 mm ready-to-use plates	100 plates	11199*
Potato Dextrose Agar	Slant tubes	10 x 7 ml tubes	30092
Potato Dextrose Agar	Bottles	6 x 200 ml bottles	413100
Potato Dextrose Agar	Dehydrated medium	500 g of powder	610102
Potato Dextrose Agar	Dehydrated medium	100 g of powder	620102
Potato Dextrose Agar	Dehydrated medium	5 kg of powder	6101025

TABLE OF SYMBOLS

LOT Batch code	Keep away from sunlight	Manufacturer	Use by	Fragile, handle with care
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests	Caution, consult Instruction For Use	Do not reuse

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