PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

Cat No. PD043 - Potato Dextrose Agar (PDA)

Intended Use:
Isolation of saprophytic and pathogenic fungi

Principle and Uses:
Potato Dextrose Agar is used for the preparation and maintenance of fungal test strains used in the growth promotion test, suitability of the counting methods and negative controls as described in the Harmonized USP/EP/JP. Potato Dextrose Agar is not intended for use in the diagnosis of disease or other conditions in humans. A medium recommended by the Harmonized USP/EP/JP for the cultivation of fungi and specifically for the preparation of the *Aspergillus brasiliensis* test strain. Conforms to USP/EP/JP performance specification. The medium is commonly abbreviated to PDA. The extract from potato and dextrose provides a nutritionally rich base that encourages mold sporulation and pigment production. **Yeast Extract** provides: Source of vitamins, B complex in particular, amino acids and other growth factors for the development of culture media, as general use for Nitrogen source.

Test Procedure
For USP/EP/JP Harmonized Pharmacopeia microbial enumeration tests Surface: inoculate with *Aspergillus brasiliensis* ATCC 16404 and incubate at 20-25° for 5-7 days to prepare inoculum for growth promotion and enumeration tests.
For the examination of food samples: Surface, or pour plate inoculation depending on the specific requirement of the test method employed; for example, FDA BAM recommends using Potato Dextrose Agar for the isolation of individual colonies from the primary selective plates if further analysis and species identification is necessary.
Or for pour plate use:

1. Add 1 mL of test sample to a sterile petri dish.
2. Add the specified amount (10 or 20 mL) of sterile, molten agar (cooled to 45 - 50°C) and swirl gently to mix well. Allow to solidify.
3. Incubate at 20 - 25°C (depending on the method being followed) for 2 - 7 days or longer

Expected Cultural Response:
Cultural response is specific to the test micro-organism, refer to specific guidelines as defined in the USP/EP/JP Harmonized Pharmacopeia.
The organisms listed are the minimum that should be used for quality control testing.

Results
Yeasts will grow as creamy to white colonies. Molds will grow as filamentous colonies of various colors. Count the number of colonies and consider the dilution factor (if the test sample was diluted) in determining the yeast and/or mold counts per gram or milliliter of material.

Limitations of the Procedures
Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow in this medium.

References
1. European Pharmacopoeia 10th Edition (2020)
2. United States Pharmacopeia National Formulary 2018: USP 41 NF 36
3. Japanese Pharmacopeia 17th Edition (2017)
4. FDA Bacteriological Analytical Manual (BAM) - www.fda.gov/Food/FoodScienceResearch/LaboratoryMethods/ucm2006949.htm

Composition

Potato Extract 4.0 g/L*
Dextrose 20.0 g/L
Agar 15.0 g/L
Yeast Extract 2.5g/L
*Equivalent to 200 g of Infusion from potatoes

Storage: 15-25°C
Appearance: Prepared medium is clear to slightly hazy, and colorless to pale yellow
pH: 5.6 ± 0.2 at 25°C

Package contents: 10 plates in a package
Exp. Date: Printed on label and on the item.
Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

Waste Disposal
After interpretation all items should be destroyed by standard incineration methods.

Performance Testing Results:
Streaking from fresh colony culture

MICROORGANISM	ATCC	Incubation Temp.(℃)	Incubation Cond.	EXPECTED RESULTS
Candida albicans	10231	20-25 ℃	Aerobic, 3-5 days	Good
Trichophyton rubrum	WS	20-25 ℃	Aerobic, 3-5 days	Good White mycelium
Penicillium notatum	10108	20-25 ℃	Aerobic, 3-5 days	Good With spores
Aspergillus brasiliensis	16404	20-25 ℃	Aerobic, 3-5 days	Good Black spores
Penicillium expansum	7861	20-25 ℃	Aerobic, 3-5 days	Good

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