

TM 344 – POTATO DEXTROSE AGAR

INTENDED USE

For isolation and enumeration of yeasts and molds from dairy and other food products.

PRODUCT SUMMARY AND EXPLANATION

Potato Dextrose Agar is recommended by APHA and F.D.A. 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.

COMPOSITION

Ingredients	Gms / Ltr
Potato extract	4.000
Dextrose	20.000
Agar	15.000

PRINCIPLE

The medium consists of Potato extract and dextrose that promote luxuriant fungal growth. Adjusting the pH of the medium by tartaric acid to 3.5, inhibits the bacterial growth. Heating the medium after acidification should be avoided as it may hydrolyze the agar which can render the agar unable to solidify.

INSTRUCTION FOR USE

- Dissolve 39 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121° C) for 15 minutes.
- Mix well before dispensing.
- In specific work, when pH 3.5 is required, acidify the medium with sterile 10% tartaric acid. The amount of acid required for 100 ml of sterile, cooled medium is approximately 1 ml. DO NOT HEAT the medium after addition of the acid.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 5.6 ± 0.2

INTERPRETATION

Culture characteristics observed after inoculating 50-100 CFU, for yeast, incubation period of 4 – 5 days at 22 - 25°C.

*Recovery for the growth of microorganism on Potato Dextrose Agar (TM 344) is considered to be 100%.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Ascospore formation	Incubation Temperature	Incubation Period

<i>Aspergillus brasiliensis</i>	16404	50-100	Luxuriant	≥ 70%	Negative	22-25°C	4-5 Days
<i>Candida albicans</i>	10231	50-100	Luxuriant	≥ 70%	Negative	22-25°C	4-5 Days
<i>Saccharomyces cerevisiae</i>	9763	50-100	Luxuriant	≥ 70%	Positive	22-25°C	4-5 Days

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. British Pharmacopoeia, 2017, The Stationery office British Pharmacopoeia
2. European Pharmacopoeia, 2017, European Dept. for the quality of Medicines.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2 nd Edition.
4. Japanese Pharmacopoeia, 2016.
5. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC
6. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 49163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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