

TM 384 – POTATO DEXTROSE AGAR W/ ROSE BENGAL

INTENDED USE

For propagation of ascospores.

PRODUCT SUMMARY AND EXPLANATION

Potato Dextrose media are 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 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. Potato Dextrose Rose Bengal Agar enhances ascospore production.

COMPOSITION

Ingredients	Gms / Ltr
Potatoes, infusion from	200.000
Dextrose (Glucose)	20.000
Agar	15.000
Rose Bengal	0.0084

PRINCIPLE

This medium consists of Potato infusion and dextrose that promote luxuriant fungal growth. Acidifying the medium to pH 3.5 by tartaric acid inhibits bacterial growth. Heating the medium after acidification should be avoided as it may hydrolyse the agar, which can render the agar unable to solidify. Rose bengal is the eosin-related dye which inhibits the spreading of some rapidly growing fungi and has antibacterial properties as well.

INSTRUCTION FOR USE

- Dissolve 39.0 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (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: Pink coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 5.6 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Ascospore formation	Recovery	Incubation Temperature	Incubation Period
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Candida albicans	10231	10-100	Good- luxuriant	Negative	>=50%	20-25°C	2-7 Days
Saccharomyces cerevisiae	9763	10-100	Good- luxuriant	Positive	>=50%	20-25°C	2-7 Days
Aspergillus niger	16404	10-100	Good- luxuriant	Negative	>=50%	20-25°C	2-7 Days

PACKAGING:

In pack size of 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.

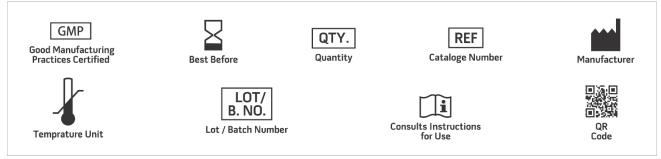
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
- 2. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
- 3. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
- 4. MacFaddin J. F., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore.
- 5. Speck M. L., (Eds.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd Ed., APHA, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only

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