TM 1922 – POTATO DEXTROSE W / 2% AGAR

INTENDED USE

For isolation and enumeration of yeasts and moulds from dairy and other food products in accordance with FDA BAM, 1998.

PRODUCT SUMMARY AND EXPLANATION

A large group of fungi found in the nature can spoil the foods and at times turns to be pathogenic to humans. This can also lead to economic losses at producer and consumer levels, apart from its toxic effects. Dilution plating and direct plating are the most common methods used in the isolation and enumeration of fungi. The direct plating is more efficient than the dilution plating method for detecting individual mold species including most of the toxin producers, but it is less effective in detecting yeasts. Potato Dextrose agar w/2% agar is recommended by FDA BAM for plate counts of yeasts and moulds in the examination of foods and dairy products. The media has also been used for stimulating sporulation, for maintaining stock cultures and for differentiation of typical varieties of dermatophytes on the basis of pigment production.

COMPOSITION

Ingredients	Gms / Ltr
Potatoes, infusion from	200.000
Dextrose (Glucose)	20.000
Agar	20.000

PRINCIPLE

This medium consists of Potato infusion 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 44.0 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. Cool to 45-50°C.
- 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

Cultural characteristics observed after incubation.

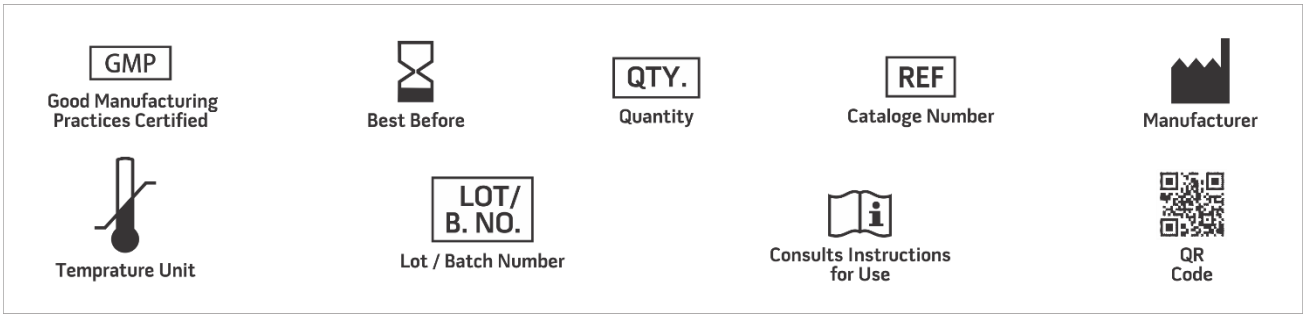
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Candida albicans	10231	10-100	Luxuriant	>=70 %	25°C	5 -7 Days
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70 %	25°C	5 -7 Days

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. FDA, U.S. 1998. Bacteriological Analytical Manual. 8 ed. Gaithersburg, MD: AOAC International.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. MacFaddin, J. F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria vol. 1. Baltimore: Williams and Wilkins.
5. 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.



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