

CM 21,435 – POTATO DEXTROSE AGAR W/ CHLORAMPHENICOL

INTENDED USE

For the selective isolation and enumeration of yeasts and moulds from dairy and other food products.

PRODUCT SUMMARY AND EXPLANATION

Potato Dextrose Agar is recommended by APHA and FDA 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. Potato Dextrose Agar with chloramphenicol is recommended for the selective isolation of fungi.

COMPOSITION

Ingredients	Gms / Ltr
Potatoes, infusion from	200.000
Dextrose (Glucose)	20.000
Agar	15.000
Chloramphenicol	0.050

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. Chloramphenicol inhibits a wide range of Gram-positive and Gram-negative bacteria which makes the medium selective for fungi.

INSTRUCTION FOR USE

Dissolve 39.05 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	: 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. Recovery rate is considered as 100% for fungus growth on Sabouraud Dextrose Agar.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Candida albicans	10231	10-100	Good-luxuriant	>=50%	20-25°C	2-7 Days
Saccharomyces cerevisiae	9763	10-100	Good-luxuriant	>=50%	20-25°C	2-7 Days
Aspergillus niger	16404	10-100	Good-luxuriant	>=50%	20-25°C	2-7 Days
Lactobacillus casei	334	>=10 ³	Inhibited	0%	20-25°C	2-7 Days
Escherichia coli	8739	>=10 ³	Inhibited	0%	20-25°C	2-7 Days
Escherichia coli	25922	>=10 ³	Inhibited	0%	20-25°C	2-7 Days
Trichophyton rubrum	28191	10-100	Good-luxuriant	>=50%	20-25°C	2-7 Days

PACKAGING:

Inpacksizeof500 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.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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