

CM 21539 - SABOURAUD DEXTROSE AGAR MEDIUM W/ CHLORAMPHENICOL (as per IP)

INTENDED USE

For selective cultivation of yeasts and molds.

PRODUCT SUMMARY AND EXPLANATION

Sabouraud Dextrose Agar Medium with Chloramphenicol is recommended for cultivation of yeasts and moulds by Indian Pharmacopoeia. This medium was described originally by Sabouraud for the cultivation of fungi, particularly useful for the fungi associated with skin infections. The medium is often used with antibiotics such as Chloramphenicol for the isolation of pathogenic fungi from materials containing large numbers of fungi or bacteria.

Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet.

COMPOSITION

Ingredients	Gms / Ltr
Meat & Casein Peptone	10.000
Dextrose monohydrate	40.000
Chloramphenicol	0.050
Agar	15.000

PRINCIPLE

Meat & Casein Peptone provide nitrogenous, carbonaceous compounds. Dextrose provides an energy source. Chloramphenicol inhibits a wide range of gram-positive and gram-negative bacteria making the medium selective for fungi. The low pH favors fungal growth and inhibits contaminating bacteria.

INSTRUCTION FOR USE

Dissolve 61.41 grams in 1000 ml distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes or as per validated cycle.

Cool to 45-50°C. Mix well and pour into sterile Petri plates.

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 response was carried out in accordance with IP, after an incubation. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar and fungus growth on Sabouraud Dextrose Agar.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	$\geq 10^3$	Inhibited	0 %	20-25°C	≤ 5 Days
Escherichia coli	8739	$\geq 10^3$	Inhibited	0 %	20-25°C	≤ 5 Days
Escherichia coli	9002	$\geq 10^3$	Inhibited	0 %	20-25°C	≤ 5 Days
Trichophyton rubrum	28191	10-100	Good	40-50%	20-25°C	≤ 5 Days
Lactobacillus casei	334	$\geq 10^3$	Inhibited	0 %	20-25°C	≤ 5 Days
Candida albicans	2091	10-100	Luxuriant	≥ 70 %	20-25°C	≤ 5 Days
Candida albicans	10231	10-100	Luxuriant (white colonies)	≥ 70 %	20-25°C	≤ 5 Days
Aspergillus brasiliensis	16404	10-100	Luxuriant	≥ 70 %	20-25°C	≤ 5 Days
Saccharomyces cerevisiae	9763	10-100	Luxuriant	≥ 70 %	20-25°C	≤ 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.



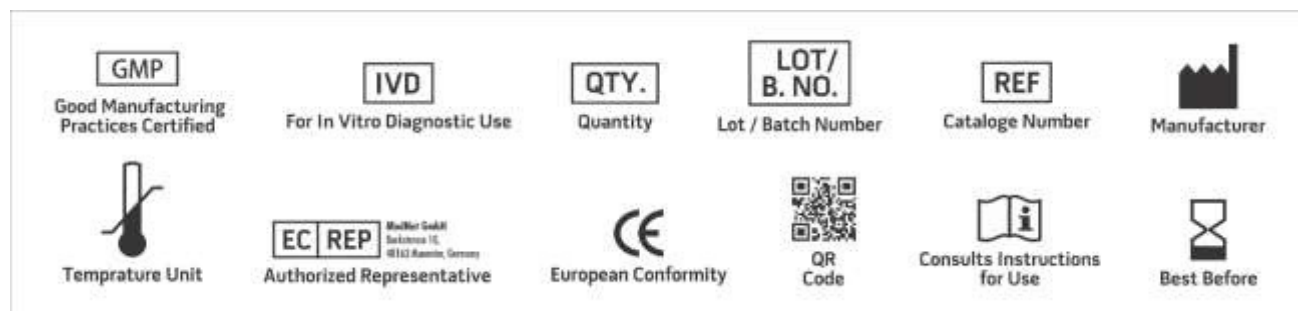
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Ajello L., 1957, J. Chron. Dis., 5:545.
2. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
3. Indian Pharmacopoeia, 2018, Ministry of Health and Family Welfare, Govt. of India, Volume 1.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
5. 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.
6. Lorian (Ed.), 1980, Antibiotics in Laboratory Medicine, Williams and Wilkins, Baltimore.
7. Murray, P. R 2005, In Manual of Clinical Microbiology, 7th ed., ASM, Washington, D.C.
8. Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
9. 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.
10. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



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

*For LabUse Only