

# TM 691 – CANDIDA MEDIUM

#### **INTENDED USE**

For selective isolation and cultivation of Candida species.

### PRODUCT SUMMARY AND EXPLANATION

Candida is a genus of yeasts responsible for infections such as osopharyngeal candidiasis, vaginal candidiasis and candidemia. Candida Medium is used for the selective cultivation and differentiation of Candida species. Candida Medium was originally developed by Nickerson. It is also used for processing and inoculation of specimens like tissues, skin scrapping, nails and hair. Selectivity of medium is increased by incorporation of penicillin and streptomycin in the medium, which helps to suppress the growth of many bacteria. Differentiation of Candida is based on the growth patterns and pigmentation of isolated colonies.

#### **COMPOSITION**

Ingredients	Gms / Ltr	
Mycological peptone	2.500	
Dextrose (Glucose)	5.000	
Disodium hydrogen phosphate	5.000	
Sodium sulphite	5.000	
Bismuth sulphite indicator	3.000	
Agar	15.000	

#### **PRINCIPLE**

Mycological peptone in the medium provides essential nitrogenous nutrients while dextrose acts as carbon source and phosphate maintains buffering action of medium. This medium also contains sodium sulphite, which is reduced by Candida species to form sulphide. Bismuth in the medium combines with the sulphide to produce brown to black pigmented colonies and zones of dark precipitate in the medium surrounding the colonies of some species. Bismuth sulphite also acts as an inhibitor of bacterial growth.

## **INSTRUCTION FOR USE**

- Dissolve 35.5 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE.
- Cool to 50 52°C and aseptically add 0.3 units of Penicillin and 25 μg Streptomycin per ml of sterile medium.
- 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 yellow coloured, clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.6±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.









Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Candida albicans	10231	10-100	Good- luxuriant	>=50%	30°C	24-48 Hours
Candida tropicalis	1369	10-100	Good- luxuriant	>=50%	30°C	24-48 Hours
Escherichia coli	25922	>=104	Inhibited	0%	30°C	24-48 Hours

### **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.

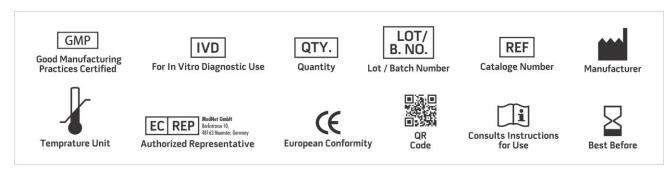
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### **DISPOSAL**

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

### **REFERENCES**

- 1. Emmons, Binford, Utz and Kwon-Chung, 1977, Medical Mycology, 3rd Ed. , W. B. Saunders Co., Philadelphia.
- 2. Haley, Trandel and Coyle, 1980, Cumitech 11, Practical Methods for Culture and Identification Of Fungi In The Clinical Mycology Laboratory, Coord Ed., Sherris, ASM, Washington, D.C.
- ${\it 3. Isenberg, H.D. Clinical \ Microbiology \ Procedures \ Handbook \ 2nd \ Edition.}$
- 4. 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.
- 5. Nickerson, 1953, J. Infect. Dis., 93:43.



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

\*For Lab Use Only
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