

## CM 20694 – FLUCONAZOLE TESTING MEDIUM (TWIN PACK)

### INTENDED USE

For fluconazole susceptibility testing using Candida species.

### PRODUCT SUMMARY AND EXPLANATION

Fluconazole Testing Medium is a chemically defined medium specifically developed for the in-vitro testing of fluconazole by using Candida species. Inhibitory concentration values obtained by using this medium correlate well with the clinical outcome.

### COMPOSITION

Ingredients	Gms / Ltr
Part I	
Agar	10.000
Part II	
Dextrose (Glucose)	19.980
Potassium dihydrogen phosphate	1.990
Ammonium sulphate	4.990
L-Glutamine	0.580
Magnesium sulphate	0.990
Sodium chloride	0.200
Calcium chloride	0.200
L-Lysine hydrochloride	0.073
Valine	0.047
L- Arginine hydrochloride	0.042
L-Histidine	0.023
DL-Methionine	0.0189
Tryptophan	0.020
Nicotinic acid	0.00079
Inositol	0.00397
Pyridoxine hydrochloride	0.00079
Boric acid	0.00099
Calcium D-pantothenic acid	0.00079
Aneurine hydrochloride	0.00079
Manganous sulphate	0.00079
Zinc sulphate	0.0014
p-Amino benzoic acid (PABA)	0.000395
Riboflavin	0.000395
Ferric chloride	0.000395



Cupric sulphate	0.00012
Biotin crystalline	0.000004
Folic acid	0.000395
L-Isoleucine	0.052
Sodium molybdate	0.00047
Potassium iodide	0.0002
L-Leucine	0.052
Threonine	0.0476

#### PRINCIPLE

The medium consists of dextrose and a variety of amino acids, salts and vitamins to support the growth of Candida and other fungi.

#### INSTRUCTION FOR USE

Part I - Dissolve 2.0 grams of Part I in 100 ml purified / distilled water, add 0.1 ml phosphate buffer to adjust the pH to 7.5.

Heat to boiling to dissolve the agar particles completely and then sterilize by autoclaving at 115°C for 10 minutes.

Part II - Dissolve 29.31 grams of Part II in 900 ml purified / distilled water.

Mix well, add 2 gram of sodium bicarbonate, after stirring make up the total volume to 1 litre with distilled water. Sterilize by filtration. The medium can be kept at 4°C for two weeks.

Complete medium is prepared by aseptically adding equal volume of molten Part I (previously cooled to 50°C) and Part II.

Mix thoroughly and dispense.

#### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Part I : Cream to light yellow homogeneous coarse powder Part II : White to light yellow homogeneous free flowing powder.

Appearance of prepared medium : Light yellow coloured, opalescent solution may be with fine precipitate.

pH (at 25°C) : 7.5

#### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	MIC of Fluconazole	Incubation Temperature	Incubation Period
Candida albicans	10231	10-100	1.56 µg/ml	28-30°C	48 Hours

#### 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 2-8°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.

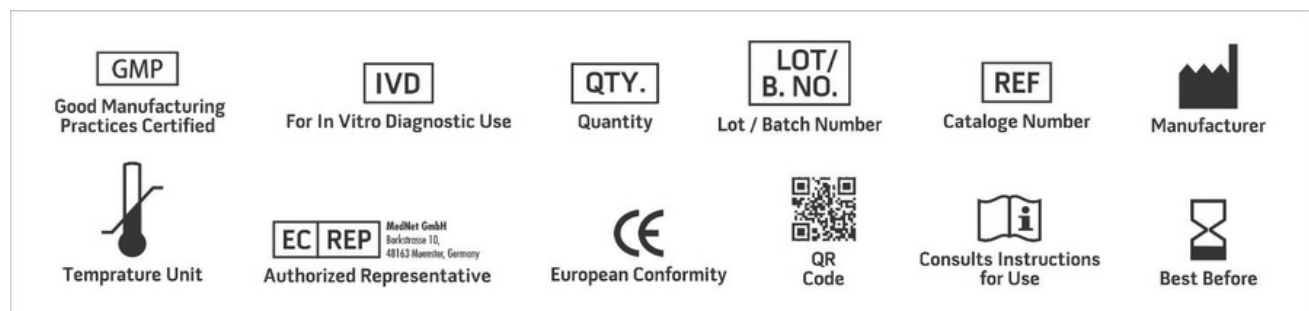
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

1. Cook R. A., McIntyre K. A. and Galgiani J. N., 1990, Antimicrob. Agents and Chemother., 34:1542.
2. Hoepfich P. D. and Finn. P. D., 1972, J. Infect, Dis., 126: 353
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. Pfaller M. A. et al, 1992, Antimicrob. Agents and Chemother.,36:1805.



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

\*For LabUse Only

