

# TM 2080 – 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.

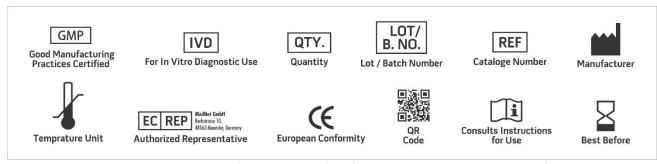
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### **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. Hoeprich 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 Lab Use Only

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