B1040	FLUCONAZOLE TESTING MEDIUM
Formula	
Ingredients :	**gms/lit.**
Part B : Dextrose	19.98
Potassium dihydrogen phosphate	1.99
Ammonium sulphate	4.99
L-Glutamine	0.58
Magnesium sulphate (anhydrous)	0.99
Sodium chloride	0.20
Calcium chloride	0.20
L-Lysine monohydrochloride	0.073
Valine	0.047
L-Arginine monohydrochloride	0.042
L-Histidine	0.023
DL-Methionine	0.0189
Tryptophan	0.02
Inositol	0.00397
Boric acid	0.00099
Caclium d-pantothenic acid	0.00079
Nicotinic acid	0.00079
Pyridoxine hydrochloride	0.00079
Aneurine hydrochloride	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-Leucine	0.052
L-Isoleucine	0.052
Sodium molybdate	0.00047
Potassium iodide	0.0002
Threonine	0.0476
Final pH (at 25°C) : Self	
Directions :	
Part A: Suspend 2 gmsof Part A (Agar powder) in 100 ml 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 10 lbs pressure (115°C) for 10 minutes. **Part B:** suspend 29.34 gmsof Part B in 900 ml. Distilled water. Mix well, add 2 gms.of Sodium bicarbonate, after stirring. 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 A (previously cooled to 50°C) and Part B. Mix thoroughly and pour into sterile petriplates.	

Refer disclaimer Overleaf

Principle :

Fluconazole Testing Medium is a chemically defined medium specifically developed for he in-vitro tsting of fluconazole by using Candida species. Inhibitory concentration values obtained by using this medium correlate well with the clinical outcome. The medium contains dextrose and a variety of amino acids, salts and vitamins to support the growth for Candida and other fungi. The inoculum size varies with different fungi. Candida species are grown in Sabouraud Dextrose Broth at 37°C for 16-18 hours and the diluted with normal saline to give following dilutions.

Candida albicans 10^5/ml
Candida tropicalis 10^5/ml
Candida krusei 10^5/ml
Candida guillermondii 10^6/ml
Candida parapsilosis 10^6/ml
Candida pseudotropicalis 10^6/ml

Surface inoculate the above diluted cultures and incubate at 28°C for 48 hours to determine MIC value of fluconazole. Dermatophytes are grown in Sabouraud Dextrose Agar at 28°C for 5-10 days. The mycelial growth is homogenized in 2ml of 0.85% saline to get a 65% light transmission. Inoculate the plates and incubate for about 5-6 days at 28°C. Check the control plates to ensure that all isolates have grown adequately and determine the Minium Inhibitory Concentration (MIC).

QC Tests – (I)Dehydrated Medium		
	Colour :	Part A : Yellowish cream Part B : Cream
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	Self
	Colour (post autoclaving/heating) :	Light yellow
	Clarity (post autoclaving/heating) :	Slightly opalescent
(III)Q.C. Test Microbiological		
	Cultural characteristics observed after 48 hrs. at 28-30°C.	
	MICROORGANISM (ATCC)	MIC OF FLUCONAZOLE
	Candida albicans (10231)	1.56 µg / ml

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.
Use :	For fluconazole susceptibility testing by using Candida species.
Storage :	Dehydrated medium andprepared medium– Between 2 to 8°C.
Packing :	500 gm bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1040	29.30 of part B + 2.00 of part A	17.064 L (Part A)	self	nil	115^0C / 10 minutes