PRODUCT DATA SHEET

RPMI AGAR W/ MOPS 2% DEXTROSE (DOUBLE PACK) TM 1876

For determining susceptibility of microorganisms to antifungal agents.

Composition

Ingredients	Gms/Ltr
Part A	
L-Asparagine	0.050
L-Aspartic acid	0.020
L-Cystine dihydrochlorid	0.0652
L-Glutamic acid	0.020
L-Glutamine	0.300
Glycine	0.010
L-Histidine hydrochloride monohydrate	0.02096
L-Hydroxyproline	0.020
L-Isoleucine	0.050
L-Leucine	0.050
L-Lysine hydrochloride	0.040
L-Methionine	0.015
L-Phenylalanine	0.015
L-Proline	0.020
L-Serine	0.030
L-Threonine	0.020
L-Tryptophan	0.005
L-Tyrosine disodium salt	0.02883
L-Valine	0.020
D-Biotin	0.0002
D-Calcium Pantothenate	0.00025
Choline chloride	0.003
Folic acid	0.001
Inositol	0.035
Niacinamide	0.001
p-Amino benzoic acid (PABA)	0.001
Riboflavin	0.0002
Pyridoxine hydrochloride	0.001
Thiamine hydrochloride	0.001
Vitamin B12	0.000005
Calcium nitrate tetrahydrate	0.100
Potassium chloride	0.400
Magnesium sulphate anhydrous	0.04884
Sodium chloride	6.000
Sodium phosphate dibasic anhydrous	0.800
Glutathione reduced	0.001
Phenol red sodium salt	0.0053

MOPS Buffer, Free acid	34.500
L-Arginine hydrochloride	0.241
Part B	
D-Glucose	20.000
Agar	15.000

*Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Part A: Dissolve 42.91 grams of Part A in 500 ml distilled water. Stir gently until the medium is completely dissolved. Do not autoclave or heat. Filter sterilize the medium using sterile membrane filter of 0.22 micron or less.

Part B: Dissolve 35 grams of Part B in 500 ml distilled water. Gently heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 psi pressure(121°C) for 15mins. Cool to 45-50°C.

Aseptically add filter sterilized Part A to Part B. Mix well and pour as desired.

Appearance: Yellowish green coloured clear to slight opalescent gel.
pH (at 25°C): 7.0±0.2

Principle

RPMI-1640 medium developed by Moore et al., at Roswell Park Memorial Institute is well known media used for cell culturing. The CLSI have published a reference method for broth dilution antifungal susceptibility testing of Yeast. Also, for use with the gradient-strip method when testing *Candida* spp. directly from colonies grown on nonselective media.

RPMI-1640 Agar can be used to determine MIC values for various antifungal agents. The formulation is based on the RPMI-1630 series of media utilizing a bicarbonate buffering system and alterations in amount of amino acid and vitamins. Amino acids, vitamins and salts provide essential nutrients. Glucose is the carbohydrate source. MOPS buffers the media. Agar acts as solidifying agent.

Interpretation

Cultural characteristics observed after incubation at 30-35°C for 24 - 48 hours for fungal cultures.

Organism	ATCC	Inoculum (CFU/ml)	Growth	MIC (Flucytosine) (µg/ml)
Candida parapsilosis	22019	10^3	Good-Luxuriant	0.06 - 0.5 µg
Candida albicans	90028	10^3	Good-Luxuriant	0.5 - 2 µg
Candida albicans	24433	10^3	Good-Luxuriant	1 - 4 µg
Candida parapsilosis	90018	10^3	Luxuriant	<=0.12 - 0.25 µg
Candida tropicalis	750	10^3	Luxuriant	<=0.12 - 0.25 µg

References

1. Reference Method for Broth Dilution Antifungal Susceptibility Testing of Yeasts; Fourth Informational Supplement. Vol.32 No.17, December 2012 CLSI document M27-S4.