

## M-Green Yeast and Fungi Broth

Catalog : HB0294-1

M-Green Yeast and Fungi Broth is used for the detection of fungi and yeast in beverage.

### Approximate Formula:

Ingredients	gm/liter
Tryptone	5.0
Peptone	5.0
Yeast extract	9.0
Glucose	50.0
Magnesium sulfate	2.1
Dipotassium phosphate	2.0
Diastase	0.05
Thiamine	0.05
Bromocresol green	0.026
Final pH4.6±0.2 at 25°C	

\*Adjusted and/or supplemented as required to meet performance criteria.

### Directions:

Suspend 73.0g of the medium in one liter of deionized or distilled water. Mix well and heat with frequent agitation. Sterilize in an autoclave at 121°C for 10 minutes.

### Principle and Interpretation:

Peptones provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Glucose is the fermentable carbohydrate providing carbon and energy. Potassium phosphate is a buffering agent. Magnesium sulfate and thiamine provide essential ions, minerals, and nutrients. Diastase is a mixture of amyolytic (starch-hydrolyzing)enzymes. Bromocresol green is the pH indicator, facilitating visualization and counting of fungal colonie. The colonies are green due to the diffusion of bromocresol green into the colonies(alkaline reaction). End products from the colonies diffuse into the medium, further reducing the pH and causing the dye to turn yellow (acid reaction). Bacterial growth is inhibited by an acid pH.

### Appearance:

Dehydrated medium is a free-flowing light green powder. The prepared medium is a kind of green transparent liquid.

### Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

### Storage conditions and Shelf life:

M-Green Yeast and Fungi Broth must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

### Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 20-25°C for 48-96 h.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Remarks
<i>Aspergillus niger</i>	ATCC 16404	10-100	Luxuriant	Growing well
<i>Candida albicans</i>	ATCC 10231	10-100	Luxuriant	Growing well
<i>Saccharomyces cerevisiae</i>	ATCC 18790	10-100	Luxuriant	Growing well

### References:

- Jong, S.S, and M.J.Edwards 1991, American Type Culture Collection Catalog of filamentog fungi 18 the. American type Collection, Rockville, MD.
- Thom and Raper, Manual of the Aspergilli 39:1945
- Smith G. An Introduction to Industrial Mycology 5th Ed. Arnold LR London, 1960.