

PRODUCT INFORMATION

M-Green Yeast and Mold Agar

Cat. No. M13-104

DESCRIPTION

M-Green Agar for Fungi and Yeasts is a medium used for the detection of yeast and fungi in beverages. This formulation is rich in nutrients which allows for excellent fungal growth.

Casein and gelatin peptone provides nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is a source of vitamins, particularly of the B-group. Dextrose is the fermentable carbohydrate providing carbon and energy. Bacteriological agar is the solidifying agent. Potassium phosphate is a buffering agent. Magnesium sulfate, thiamine, and diastase (a mixture containing amylolytic (starch) enzymes) provide essential ions, minerals, and nutrients. Bromocresol Green is the pH indicator, facilitating visualization and counting of fungal colonies. The colonies are green due to diffusion of bromocresol green into the colonies. The end products of the microbial growth diffuse into the medium, reducing the pH and turn the indicator to yellow. Bacterial growth is inhibited by an acid pH.

Yeast are large green opaque colonies. Mould appear green and filamentous. Bacteria able to grow at this pH form smaller clear to white colonies.

FORMULA (g/L)

Peptone	5.0 g	Yeast extract	9.0 g
Dextrose	50.0 g	Potassium phosphate monobasic	2.0 g
Casein peptone	5.0 g	Thiamine	0.05 g
Magnesium sulfate	2.0 g	Bromocresol green	0.025 g
Diastase	0.02 g		

Final pH: 4.6 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Suspend 73 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. AVOID OVERHEATING. Dispense into appropriate containers and sterilize in autoclave at 121°C for 10 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is green without rests.
3. Expected cultural response after 48-72 hours at 25-30 °C.

ORGANISM	RESULT
<i>Candida albicans</i> ATCC 10231	Good Growth
<i>Aspergillus brasiliensis</i> ATCC 16404	Good Growth
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good Growth

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 25°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.