Technical Data Sheet

m-Green Yeast and Mold Broth – 2mL Liquid Media Ampoules
Cat. No. MHA000P2M

This medium is recommended for yeast and mold detection in soft drinks and other beverages.

Mode of Action
m-Green Yeast and Mold Broth is a relatively more complex formula compared to other media used for detection of fungi and yeast. This formulation is rich in nutrients which allows excellent fungal growth. Bacterial growth is inhibited by an acidic pH. Enzymatic digest of casein and enzymatic digest of animal tissue provide nitrogen, carbon and amino acids in the media. Yeast extract is the vitamin source. Dextrose is an energy source for the metabolism of fungi. Potassium phosphate is a buffering agent. Magnesium sulfate, thiamine, and diatase 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 the diffusion of bromocresol green into the colonies (alkaline reaction). Acidic end products from the colonies diffuse into the medium, further reducing the pH and causing the dye to turn yellow (acidic reaction).

Typical Composition (per liter of purified water)

Polypeptone peptone	10.0 g	Potassium Phosphate	2.0 g
Yeast Extract	9.0 g	Diatase	0.05 g
Cerelose / Dextrose	50.0 g	Thiamine	0.05 g
Magnesium Sulfate	2.1 g	Bromocresol Green	0.026 g

Application
1. Collect the liquid sample in a sterile container. Sodium thiosulfate is necessary when the sample contains a residual disinfectant. The sample should be a 100 ml minimum. Dilution of the sample will be necessary if a high number of bacteria colonies are expected.
2. Invert one m-Green Yeast and Mold Broth ampoule 2 to 3 times. Open the ampoule. Remove the lid of a petri dish and carefully pour the contents equally onto the absorbent pad.
3. Set up the membrane filtration apparatus. Use sterile forceps to put the membrane filter in the assembly. The grid side is up.
4. Invert the sample / diluted sample for approximately 30 seconds to thoroughly mix the sample.
5. Pour the sample / diluted sample into the funnel. If the volume is less than 20ml, add 10 ml of sterile buffered dilution water to the funnel.
6. Apply the vacuum until the funnel is empty. Then stop the vacuum.
7. Rinse the funnel with 20ml to 30ml of sterile buffered dilution water. Apply the vacuum. Rinse the funnel two more times.
8. Stop the vacuum when the funnel is empty. Remove the funnel from the assembly. Use sterile forceps to lift the membrane filter.
9. Put the membrane filter on the absorbent pad. Let the membrane filter bend and fall equally across the absorbent pad to make sure that the air bubbles are not trapped below the filter.
10. Secure the lid on the petri dish and invert the dish.
11. Incubate the inverted petri dish for 48-72 hours at 28 - 35° C.
12. Remove the petri dish from the incubator. Use a microscope to count the number of bacteria colonies on the membrane filter.
13. Interpret and report the results.

Results Reporting
Report the colony density as the number of colonies in 100ml of sample. If there's more than 200 colonies, dilute the sample and use the diluted sample in the test procedure.

Colonies in 100ml = Colonies counted / ml of sample x 100.

Storage and Shelf Life
The product can be used until the expiry date if the unopened ampoules are stored sealed in the aluminum foil bag at 2 – 10°C.

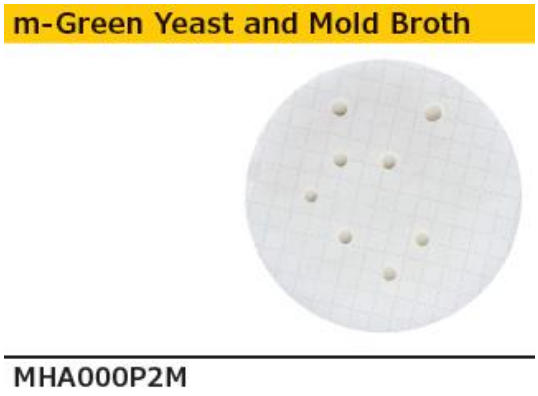
Disposal
Please dispose of used culture medium in accordance with local regulations (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Function	Control Strains	Incubation	Reference Medium	Method of Control	Expected Results
Productivity	*Saccharomyces cerevisae* ATCC® 9763 WDCM 00058	48 +/- 2 hours at 35 +/- 0.5° C	Previously validated batch of m-Green Yeast and Mold Broth	Quantitative	Recovery 85-115% Characteristic colonies
	Asperigillus niger (mold) ATCC® 16404 WDCM 00053				Recovery 85-115% Characteristic colonies

Please refer to the actual batch specific certificate of analysis.

Yeast appear as large green opaque colonies.
Mold appears as green and filamentous.
Bacteria able to grow at the pH form smaller clear to white colonies.



Ordering Information

Product	Cat. No.	Pack size
m-Green Yeast and Mold	MHA000P2M	50 x 2 mL plastic ampoules

Literature

MacFaddin JF (1985): Media for Isolation – Identification – Cultivation – Maintenance of Medical Bacteria. Williams and Wilkins. Vol I. Baltimore.

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