Yeast Malt Agar (YM Agar)

Intended Use
Yeast Malt Agar (YM Agar) is used for the isolation and cultivation of Yeasts, Moulds and other Aciduric microorganisms.

Summary
Yeast Malt Agar is formulated as per Wickerham for isolation and cultivation of Yeasts, Moulds and other Aciduric microorganisms. Fungistatic materials such as sodium propionate and diphenyl are added to YM Agar to eliminate moulds and thus permits enumeration of yeasts from mixed population. YM Agar is also recommended by APHA. Wickerham suggested the use of Yeast Malt Broth as an enrichment medium for yeasts by adding a layer of sterile paraffin oil (about 1 cm) on the surface of inoculated broth. After the growth occurs it should be streaked on YM Agar to obtain isolated colonies of fermentative species. To isolate fermentative as well as oxidative strains, acidified YM Broth is placed on a rotary shaker for 1 or 2 days which favors development of yeast cells while the sporulation of moulds is prevented and yeasts can be isolated by streaking on YM Agar.

Principle
Peptic digest of animal tissue serves as a source of carbon, nitrogen and essential nutrients. Yeast extract supplies vitamin B complex nutrients and other growth factors. Malt extract serves as an additional source of carbon. Dextrose is the carbohydrate and energy source. To increase the selectivity, the media can be acidified by the addition of sterile 10% lactic acid or by addition of 10% HCl, tartaric acid or 10% citric acid. Alternatively, antibiotics (penicillin 20 U/mL or streptomycin to a final concentration of 40 mcg/mL) can be added. Acidified agar medium should not be reheated.

Formula*

Ingredients	**g/L**
Dextrose	10.0
Peptic Digest of Animal Tissue	5.0
Malt Extract	3.0
Yeast Extract	3.0
Agar	20.0
Final pH (at 25°C)	6.2 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 41.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
5. To make the medium selective, acidify the medium to pH 3.0 to 4.0 by adding sterile acid (10% HCl, tartaric acid or 10% Citric acid) or antibiotics.
6. DO NOT REHEAT the medium after the addition of antibiotics or acids.

Quality Control

Dehydrated Appearance: Cream to beige coloured, homogeneous, coarse free flowing powder.
Prepared Appearance: Light amber coloured, clear to slightly opalescent gel forms in petridishes.
Cultural Response: Cultural characteristics observed after an incubation of 40 - 72 hours at 20°C-25°C for yeast and mold and at 30°C-35°C for bacteria.

Organism (ATCC)	Growth	Incubation Temperature	Incubation Period
Candida albicans 3147 (10231)	Good	20°C-25°C	48 Hours
Aspergillus brasiliensis WLRI 034(120) (16404)	Good	20°C-25°C	72 Hours
Saccharomyces cerevisiae NRRL Y-567 (9763)	Good	20°C-25°C	48 Hours
Escherichia coli (25922)	Good	30°C-35°C	40 Hours
Lactobacillus casei (9595)	Good	30°C-35°C	40 Hours
Lactobacillus leichmannii (4797)	Good	30°C-35°C	40 Hours

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Direction
2. Storage
3. Expiry

Warranty

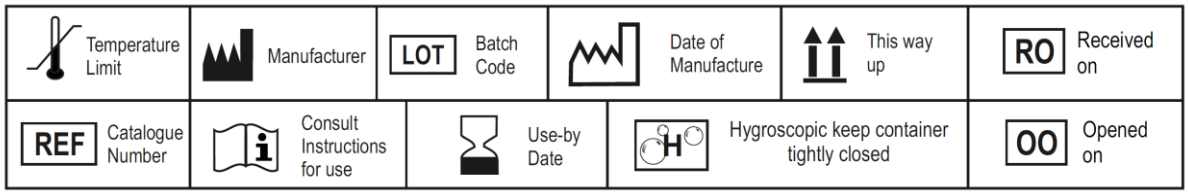
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Wickerham L. J., 1951, U.S. Dept. Agric. Tech. Bull. No.1029.
2. Wickerham L. J., 1939, J. Tropical Med. Hyg., 42:176.
3. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological examination of Foods, 4th Ed, APHA Inc. Washington DC.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
201250090500	Dehydrated Culture Media	500 g



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.