TM 397 - ISP MEDIUM NO. 2 (YEAST MALT AGAR)

INTENDED USE
For cultivation of yeasts, molds and aciduric microorganisms.

PRODUCT SUMMARY AND EXPLANATION
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. Yeast Malt 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.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	5.000
Yeast extract	3.000
Malt extract	3.000
Dextrose	10.000
Agar	20.000

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 sterile10% Lactic Acid or by addition of 10% HCl, tartaric acid or 10% citric acid. Alternatively, antibiotics (penicillin 20U/ml or streptomycin to a final concentration of 40mcg/ml) can be added. Acidified agar medium should not be reheated.

INSTRUCTION FOR USE
- Dissolve 20.5 grams in 490 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- For preparing selective media acidify the media up to pH 3.0 to 4.0 by aseptically adding 1 vial of 10% Lactic Acid Solution, do not heat the media after addition of acid.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to beige homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 6.2±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

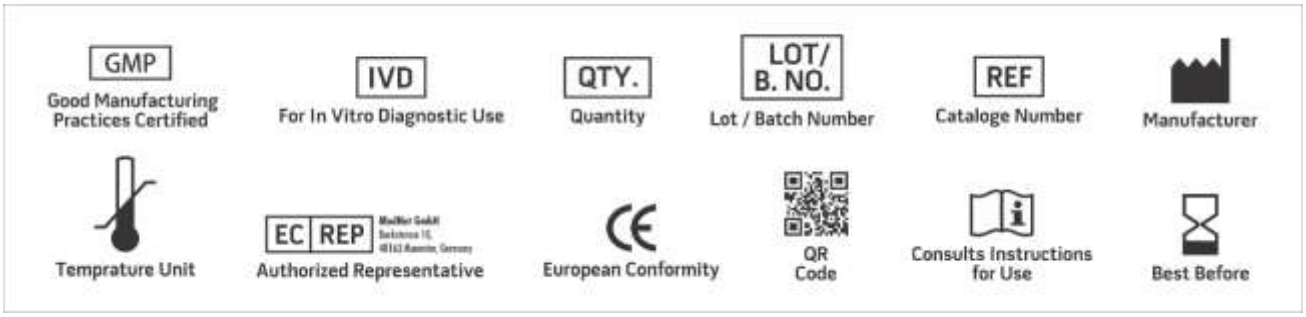
Microorganism	ATCC	Inoculum (CFU/ml)	Growth at PH 3.4	Growth at PH 6.2	Recovery	Incubation Temperature	Incubation Period
Aspergillus brasiliensis	*16404*	10-100	Good-luxuriant	Good-luxuriant	>=50%	25-30°C	40-72 Hours
Candida albicans	*10231*	10-100	Good-luxuriant	Good-luxuriant	>=50%	25-30°C	40-72 Hours
Escherichia coli	*25922*	50-100	Inhibited	Good-luxuriant	>=50%	25-30°C	40-72 Hours
Lactobacillus casei	*9595*	50-100	Poor	Good-luxuriant	>=50%	25-30°C	40-72 Hours
Lactobacillus leichmannii	*4797*	50-100	Poor	Good-luxuriant	>=50%	25-30°C	40-72 Hours
Saccharomyces cerevisiae	*9763*	10-100	Good-luxuriant	Good-luxuriant	>=50%	25-30°C	40-72 Hours

PACKAGING:
In pack size of 100 gm and 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
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.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 08 Nov., 2019