TM 2236 - MALT EXTRACT AGAR BASE, MODIFIED AS PER THOM AND CHURCH

INTENDED USE

For isolation, detection and enumeration of yeasts and moulds.

PRODUCT SUMMARY AND EXPLANATION

Malt Extract medium is recommended for the isolation, detection and enumeration of yeasts and moulds. Malt Extract Agar has been used for many years for the detection of yeast and moulds in a wide variety of materials including dairy products and foods. The medium is also suitable for maintaining stock cultures of fungi. Reddish described a medium prepared from malt extract which was an acceptable substitute for wort. Following the formula of Reddish, Thom and Church used Malt extract as a base from which they prepared the complete media.

Streak the specimen as soon as possible after it is received in the laboratory. Consult appropriate references for information regarding the processing and inoculation of specimens. For isolation of fungi from potentially contaminated specimen, a selective medium should be inoculated along with the non-selective medium. Incubate the plates at 25 to 30°C with increased humidity for upto 7 days. Examine the plates for fungal colonies and for confirmation, perform biochemical test and serological diagnosis.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	0.780
Maltose	12.750
Dextrin	2.750
Agar	15.000

PRINCIPLE

Peptic digest of animal tissue provides essential growth nutrients for the growth of fungi. Maltose and dextrin are the suitable carbohydrates for the growth of fungi. The low pH inhibits bacterial growth.

INSTRUCTION FOR USE

- Dissolve 31.28 grams in 1000 ml distilled water. Add 2.35 gm glycerol.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Avoid overheating.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 4.7±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period

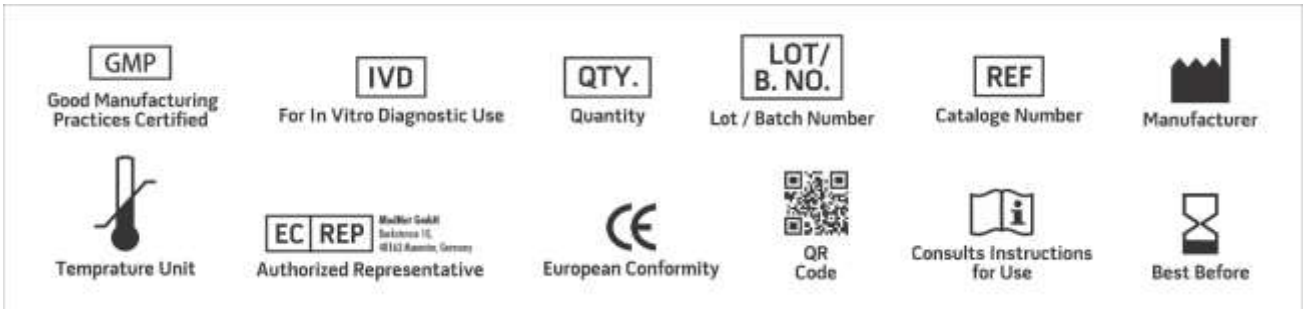
Aspergillus brasiliensis	16404	10-100	Luxuriant	>=70 %	25-30°C	40-48 Hours
Candida albicans	10231	10-100	Luxuriant	>=70 %	25-30°C	40-48 Hours
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70 %	25-30°C	40-48 Hours

PACKAGING:
In pack size of 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. Reddish, 1919, Abst. Bact., 3:6.
2. Thom and Church, 1926, The Aspergilli.
3. Lennett, Balows, Hausler and Shadomy (Eds.), 1985, Manual of Clinical Microbiology, 4th ed., ASM, Washington, D.C.
4. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed. American Public Health Association, Washington, D.C.
5. Ajello L., Georg L. K., Kaplan W. and Kaufman L., 1963, CDC Laboratory Manual for Medical Mycology, Washington, D. C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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