

# TM 2234 - MALT AGAR, MODIFIED

#### **INTENDED USE**

For isolation and enumeration of yeasts and moulds from food products in accordance with FDA BAM,1998.

## PRODUCT SUMMARY AND EXPLANATION

Media based on malt extract may be considered as general growth substrates due to their richness and nutrient balance. They are very suitable for the cultivation of fastidious microorganisms. With acidic pH, they are used for the isolation, cultivation and maintenance of yeast and moulds.

Malt media for yeasts and moulds have been widely used for many years. In 1919, Reddish prepared a satisfactory substitute for beer wort from malt extract for use in both antibiotic and acidified standard methods for yeast and mould counts in food.

## **COMPOSITION**

Ingredients	Gms / Ltr		
Malt extract	20.000		
Agar	20.000		

## **PRINCIPLE**

2% Malt Extract Agar contains malt extract, which provides carbon, protein and nutrient sources required for the growth of microorganisms. The acidified medium inhibits the growth of bacteria and allows good recovery of yeasts and moulds.

## **INSTRUCTION FOR USE**

- Dissolve 40.00 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates or distribute into tubes as desired.

## **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Powder** : Cream to beige homogeneous free flowing powder.

**Appearance of prepared medium** : Amber coloured clear to slightly opalescent gel forms in Petri plates.

**pH (at 25°C)** : 5.5±0.2

#### **INTERPRETATION**

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus niger	16404	10-100	Luxuriant	>=70%	25-30°C	48-72 Hours









Candida albicans	10231	10-100	Luxuriant	>=70%	25-30°C	48-72 Hours
Saccharomyces cerevisiae	9763	10-100	Luxuriant	>=70%	25-30°C	48-72 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.

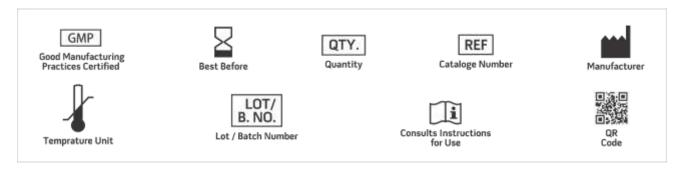
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### **DISPOSAL**

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

## **REFERENCES**

- 1. Can. Dept. Agr. Pamphlet, 92-N.S.
- 2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 4. Reddish, 1919, Abstr. Bacteriol., 3:6.
- 5. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, 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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