

## MALT EXTRACT AGAR

**CAT N°: 1038**

For the cultivation, isolation, and enumeration of fungi and yeast

### FORMULA IN g/l

Maltose Certified	12.75	Peptone	0.78
Dextrin	2.75	Bacteriological Agar	15.00
Glycerol	2.35		

**Final pH 4.7 ± 0.2 at 25°C**

### PREPARATION

Suspend 33.6 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. DO NOT OVERHEAT. Sterilize in autoclave at 118°C for 10 minutes. Cool to 45-50°C, mix well and dispense into plates. The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

NOTE: If the medium is overheated the agar loses its capacity to solidify and will remain soft.

### USES

MALT EXTRACT AGAR is used for the isolation, cultivation and **enumeration** of yeasts and molds from foods.

Malt extract provides the carbon, protein and nutrient sources required for the growth of microorganisms. It is particularly suitable for yeasts and molds as it contains a high concentration of maltose and other saccharides as energy sources. Dextrin and Glycerin are the carbon sources, and Peptone is a nitrogen source. Bacteriological agar is the solidifying agent. The acidic pH of the Malt Extract Agar is optimum for the growth of yeasts and molds whilst restricting other bacterial growth.

Malt Extract Agar has been used for years to cultivate fungi and yeast cultures in the sugar industry, in the manufacturing of syrups, soft drinks, and other drinks.

Inoculate and incubate at 30 ± 2°C for 18 – 48 or 72 hours.

It is also recommended for use in conjunction with other specific media such as Orange Serum Agar (Cat. 1307), Yeast Extract Agar (Cat. 1312) or other media for yeasts and fungi.

### MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30 ± 2°C and observed after 18-48 or 72 hours.

Microorganisms	Growth
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good
<i>Sacharomyces uvarum</i> ATCC 9080	Good
<i>Candida albicans</i> ATCC 10231	Good
<i>Aspergillus brasiliensis</i> ATCC 16404	Good

## BIBLIOGRAPHY

Thom and Raper, Manual of the Aspergilli 39:1945

## STORAGE

Once opened keep powdered medium closed to avoid hydration.

