

CM 21143 - MALT EXTRACT AGAR BASE

INTENDED USE

For detection and cultivation of Yeasts.

PRODUCT SUMMARY AND EXPLANATION

Mediabased on malt extract maybe consideredas 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 Extract Agar Base is recommended for the detection and cultivation of yeasts. Yeasts are more demanding than moulds. Most species are unable to assimilate nitrate and complex carbohydrates; some require vitamins. Some yeasts species are capable of growing in the presence of preservative, the most common among these species is *Zygosaccharomyces bailii* but *Candida krusei* and *Pichia fermentans* are also capable of growing in the presence of preservatives.

COMPOSITION

Ingredients	Gms / Ltr
Malt extract	20.000
Peptone	1.000
Dextrose (Glucose)	20.000
Agar	20.000

PRINCIPLE

Maltextract provides carbon, protein and nutrient sources required for the growth of microorganisms. Malt extract provides an acidic environment and nutrients favorable for growth and metabolism of yeasts. Dextrose is the fermentable carbohydrate. The acidified medium inhibits the growth of bacteria and allows good recovery of yeasts and moulds.

INSTRUCTIONFORUSE

Dissolve 61 grams in1000 ml purified/distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 121°C for 15 minutes.

Cool to 45-50°C and add 5 ml glacial acetic acid and immediately dispense as desired, because the medium cannot be reheated.

The final pH is approximately 3.2

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Yellow to brownish yellow homogeneous free flowing powder.
Appearance of prepared medium	: Amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.0±0.0

INTERPRETATION

Culturalcharacteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Candida krusei	24408	10-100	Luxuriant	≥70 %	25-30°C	3-5 days
Zygosaccharomyces bailii	4549	10-100	Luxuriant	≥70 %	25-30°C	3-5 days
Pichia fermentans	10651	10-100	Luxuriant	≥70 %	25-30°C	3-5 days

PACKAGING:

Inpacksize 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. Compendium of methods for the microbiological Examination of foods (Beuchat & Cousin, 2001, Cousin et al., 2001).
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. Third edition of the book Fungi and Food spoilage (Pitt & Hocking, 2009).

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MediStar GmbH Buckhorn 10, 40143 Düsseldorf, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

*For Lab Use Only

