



## Malt Extract Agar

M137

### Intended Use:

Malt Extract Agar is recommended for the detection, isolation and enumeration of yeasts and moulds from clinical and non clinical samples.

### Composition\*\*

Ingredients	Gms / Litre
Malt extract	30.000
Mycological peptone	5.000
Agar	15.000
Final pH ( at 25°C)	5.4±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 50.0 grams in 1000 ml distilled water and soak for 15 minutes. Sterilize by autoclaving at 115°C(10 lbs pressure) for 10 minutes. Mix well before dispensing. Avoid overheating. If desired, to adjust acidic pH use 10% Lactic Acid (FD095).

### Principle And Interpretation

The laboratory diagnosis of fungal infection relies largely on direct as opposed to indirect methods. The use of malt and malt extracts for the propagation of yeasts and moulds is quite common. Reddish (1) described a culture medium prepared from malt extract that was a satisfactory substitute for wort. Malt Extract Medium is similar to the formula of Galloway and Burgess (2) used for the detection, isolation and enumeration of yeasts and moulds.

Malt extract provides an acidic environment and nutrients favourable for growth and metabolism of yeasts and moulds. Mycological peptone rapidly gives a luxuriant growth with typical morphology and pigmentation. For mycological count, it is advisable to adjust the reaction of medium more acidic with addition of 10% lactic acid. Antibiotics may be added as sterile solutions to the molten medium immediately before pouring into sterile Petri plates (3) in order to suppress bacterial growth.

### Type of specimen

Clinical samples : skin scrappings

### Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).

After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/ eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

### Limitations

1. It is a general purpose medium which supports growth of bacterial and fungal cultures.
2. Further biochemical tests must be carried out for further identification

### Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

### Quality Control

#### Appearance

Cream to beige homogeneous free flowing powder

**Gelling**

Firm, comparable with 1.5% Agar gel

**Colour and Clarity of prepared medium**

Amber coloured clear to slightly opalescent gel forms in Petri plates

**Reaction**

Reaction of 5.0% w/v aqueous solution at 25°C. pH : 5.4±0.2

**pH**

5.20-5.60

**Cultural Response**

Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours.

**Cultural Response**

Organism	Growth	Inoculum (CFU)	Recovery
<b>Cultural Response</b> <i>Aspergillus brasiliensis</i> ATCC 16404 (00053*)	luxuriant	50-100	
<i>Candida albicans</i> ATCC 10231 (00054*)	luxuriant	50-100	>=70%
<i>Saccharomyces cerevisiae</i> ATCC 9763 (00058*)	luxuriant	50-100	>=70%

Key : \*Corresponding WDCM numbers.

**Storage and Shelf Life**

Store below 30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Use before expiry date on the label. Product performance is best if used within stated expiry period.

**Disposal**

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

**Reference**

1. Reddish A., 1919, Abstr. Bacteriol., 3:6.
2. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.
3. Galloway L. D. and Burgess R., 1952, Applied Mycology and Bacteriology, 3rd Ed., Leonard Hill, London, pg. 54 and 57.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2<sup>nd</sup> Edition.
5. 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.

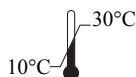
Revision : 02 / 2018



In vitro diagnostic medical device



CE Marking



Storage temperature



Do not use if package is damaged



HiMedia Laboratories Pvt. Limited,  
23 Vadhani Industrial Estate,  
LBS Marg, Mumbai-86, MS, India



CE Partner 4U ,Esdoornlaan 13, 3951  
DB Maarn The Netherlands,  
[www.cepartner4u.eu](http://www.cepartner4u.eu)

**Disclaimer :**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.