

## CM 21144 - MALT EXTRACT AGAR BASE W/ MYCOLOGICAL PEPTONE

### INTENDED USE

For detection, isolation, and enumeration of yeasts and molds.

### PRODUCT SUMMARY AND EXPLANATION

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 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 used for the detection, isolation and enumeration of yeasts and moulds.

### COMPOSITION

| Ingredients         | Gms / Ltr |
|---------------------|-----------|
| Malt extract        | 30.000    |
| Mycological peptone | 5.000     |
| Agar                | 15.000    |

### PRINCIPLE

Malt extract provides an acidic environment and nutrients favorable 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 in order to suppress bacterial growth.

### INSTRUCTION FOR USE

Dissolve 50.0grams in 1000 ml purified/distilled water and soak for 15 minutes.

Sterilize by autoclaving at 115°C (10 psi pressure) for 10 minutes.

Mix well before dispensing. Avoid overheating.

If desired, to adjust acidic pH use 10% Lactic Acid.

### 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)                  | : 5.4±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                | 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:

Inpacksizeof500 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.

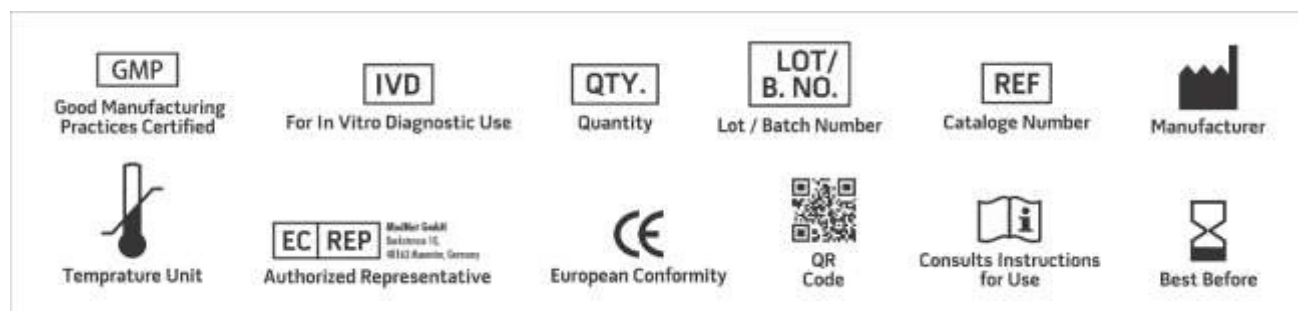
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

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



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

\*For Lab Use Only

