

## TM 708 – CZAPEK MALT AGAR

### INTENDED USE

For isolation, detection and cultivation of saprophytic fungi, yeasts and moulds.

### PRODUCT SUMMARY AND EXPLANATION

Saprophytic fungi are the largest group of fungi, which grow on dead organic matter such as fallen trees, cow patties, dead leaves, and even dead insects and animals. These fungi have enzymes that work to “rot” or “digest” the cellulose and lignin found in the organic matter, with the lignin being an important source of carbon for many organisms. *Penicillium*, commonly known as “bread mould”, is a saprophytic fungus that has various industrial applications both in food and environment. Czapek Malt Agar is used for isolation, detection and cultivation of saprophytic fungi, yeasts and moulds, mainly for *Penicillium*.

### COMPOSITION

Ingredients	Gms / Ltr
Malt extract	40.000
Sucrose	30.000
Sodium nitrate	2.000
Potassium chloride	0.500
Magnesium sulphate	0.500
Ferrous sulphate	0.010
Dipotassium hydrogen phosphate	1.000
Agar	20.000

### PRINCIPLE

This medium contains sodium nitrate as the sole source of nitrogen. Sucrose and malt extract serves as the carbohydrate sources for the growing fungi. Various salts in the medium not only buffer the medium but also provide essential ions to the fungi. Slightly acidic pH of the medium favours the growth of saprophytic fungi.

### INSTRUCTION FOR USE

- Dissolve 94.01 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.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium pH (at 25°C)	: Medium amber coloured, slightly opalescent gel forms in Petri plates. : 6.8±0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Aspergillus brasiliensis</i>	16404	10-100	Good-luxuriant	>=50%	25-30°C	48-72 Hours
<i>Candida albicans</i>	10231	10-100	Good-luxuriant	>=50%	25-30°C	48-72 Hours
<i>Saccharomyces cerevisiae</i>	9763	10-100	Good-luxuriant	>=50%	25-30°C	48-72 Hours
<i>Pencillium notatum</i>	10108	10-100	Luxuriant	>=70%	25-30°C	48-72 Hours

**PACKAGING:**

In pack size of 100 gm and 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**

- Booth C., (Ed.), 1971, Methods in Microbiology by Norris J.R. and Ribbons, D.W., Vol. 4, Academic Press, London.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015)3 Manual of Clinical Microbiology, 11th Edition. Vol. 1.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Borkstrasse 10, 48163 Muenster, Germany</small>	 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**  
**Revision: 08 Nov., 2019**



