

## TM 2438 - YEAST MOULD CHLORAMPHENICOL AGAR, MODIFIED

### INTENDED USE

For enumeration of yeasts and moulds from food using membrane filter technique. Also recommended when ISO-Grid and Neo-Grid protocols of filtration are followed.

### PRODUCT SUMMARY AND EXPLANATION

Yeast Mould Chloramphenicol Agar, Modified is recommended for enumeration of yeasts and moulds from foods using membrane filter technique. ISO-Grid and Neo-Grid protocols of filtration can be adopted for the same. To quantify the number of yeasts and moulds, a known amount of sample homogenate of food is prepared. Further 1 ml of homogenate is passed through the pre filter and ISO GRID membrane filter. The membrane filter is then placed on surface of Yeast Mould Chloramphenicol Agar, Modified plate. The surface of plate should be dry to avoid merging of developed colonies. Plates should be incubated in inverted position. Results may be interpreted after 48-52 hours on incubation at 20-25°C. It may be incubated further upto 72 hours for slow growing yeasts. The membrane filter is examined for developed colonies. Yeasts develop as blue coloured colonies while molds as blue-grey in colour.

### COMPOSITION

Ingredients	Gms / Ltr
Papaic digest of soyabean meal	20.000
Casein enzymic hydrolysate	20.000
Dextrose	5.000
Sodium chloride	5.000
Dipotassium hydrogen phosphate	2.400
Trypan Blue	0.030
Chloramphenicol	0.100
Agar	15.000

### PRINCIPLE

This medium contains papaic digest of soyabean meal and casein enzymic hydrolysate supplying necessary nitrogenous and vitamin sources. Dextrose serves as fermentable carbon source. Sodium chloride maintains osmotic balance. Dipotassium hydrogen phosphate is a buffering agent. Trypan blue imparts blue colour to colonies of yeasts and moulds. Chlortetracycline and chloramphenicol selectively inhibits bacterial growth.

### INSTRUCTION FOR USE

- Dissolve 67.53 grams in 995 ml distilled water.
- Heat to boiling to dissolve the medium completely by agitating intermittently.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add the rehydrated contents of 1 vial of Chlortetracycline selective supplement.
- Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS



**Appearance of Powder** : Cream to tan homogeneous free flowing powder.  
**Appearance of prepared medium** : Light blue to dark blue grey coloured clear to slightly opalescent gel forms in Petri plates.  
**pH (at 25°C)** : 7.0±0.2

### INTERPRETATION

Cultural characteristics observed with added chlortetracycline Selective supplement after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
<i>Aspergillus brasiliensis</i>	16404	50-100	Good-luxuriant	≥50%	Blue	20-25°C	48-72 Hours
<i>Candida albicans</i>	10231	50-100	Good-luxuriant	≥50%	Blue	20-25°C	48-72 Hours
<i>Escherichia coli</i>	25922	≥10 <sup>3</sup>	Inhibited	0%	-	20-25°C	48-72 Hours
<i>Bacillus subtilis</i>	6633	≥10 <sup>3</sup>	Inhibited	0%	-	20-25°C	48-72 Hours
<i>Saccharomyces cerevisiae</i>	9763	50-100	Good-luxuriant	≥50%	Blue	20-25°C	48-72 Hours

### PACKAGING:

In pack size 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

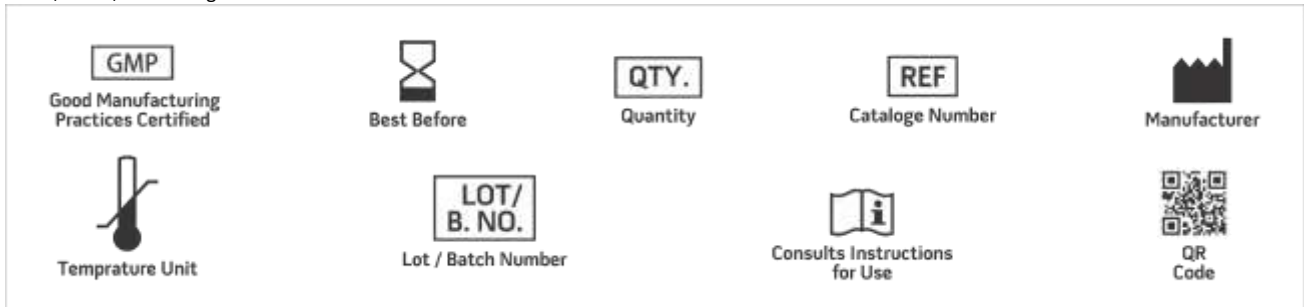
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### REFERENCES

1. Entis, P. 1996. JAOAC Int. 79: 1069-1082.



- Entis P. and I.Lerner. 1996. J.Food Prot.59:416.
- Lin, C.C.S., D.Y.C.Fung and P.Entis.1984.Can.J.Microbiol. 30:1405-1407



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

**\*For Lab Use Only**  
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