TM 2178 - M-BCG YEAST AND MOULD BROTH, MODIFIED

INTENDED USE

For the detection of fungi in the routine analysis of beverages.

PRODUCT SUMMARY AND EXPLANATION

The number of microbes present in beverages depends on the methods of processing and means of preservation. High microbial populations often indicate poor quality in raw material, unsanitary equipments or opportunity for growth in the food at some stage in the process. Heat processed beverages will be free of aciduric microorganism but may yield low numbers of viable spore forming bacteria when cultured on nonselective media. Bacteria cannot grow in the high acid environment and therefore direct microscopic count for yeast, bacteria or moulds may provide a clue to the conditions of sanitization during processing. Heat resistant spores may be present in low numbers. Because of their slow growth and poor competitive ability, yeast and moulds often manifest themselves on or in foods in which the environment is less favourable for bacterial growth.

M-BCG Yeast and Mould Broth, Modified is also recommended for detecting fungi in routine analysis of beverages using membrane filter technique.

The membrane filter pad is saturated with 2.0 to 2.5 ml broth. Place the membrane filter used for filtration of test sample on the saturated pad and incubate at 30-35°C for 48-72 hours.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	9.000
Dextrose	50.000
Panceratic digest of casein	5.000
Peptic digest of animal tissue	5.000
Magnesium sulphate	2.100
Potassium phosphate	2.000
Diastase	0.500
Thiamine	0.500
Bromocresol green	0.026

PRINCIPLE

It contains pancreatic digest of casein and peptic digest of animal tissue as nitrogen source therefore differing in composition of M-BCG Yeast and Mould Broth which contains biopeptone as nitrogen source.

Essentially even pancreatic digest of casein and peptic digest of animal tissue serves as rich nutrient source for growth of yeasts and moulds. Yeast extract and Thiamine together provides growth factors and B vitamin to the growing yeast and molds. Dextrose serves as the energy source. Diastase is a mixture of amylolytic enzymes. Bromocresol green acts the pH indicator which is green at acidic pH (4.0) while blue at pH 5.6. Phosphate salts buffers the medium well. The low pH inhibits bacterial growth.

INSTRUCTION FOR USE

- Dissolve 7.41 grams in 100 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 10 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to light green homogeneous free flowing powder
Appearance of prepared medium : Green coloured slightly opalescent solution, may contain a slight precipitate
pH (at 25°C) : 4.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus brasiliensis	16404	50-100	Good-luxuriant	>=50 %	30-35°C	48-72 Hours
Candida albicans	10231	50-100	Good-luxuriant	>=50 %	30-35°C	48-72 Hours
Saccharomyces cerevisiae	9763	50-100	Good-luxuriant	>=50 %	30-35°C	48-72 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

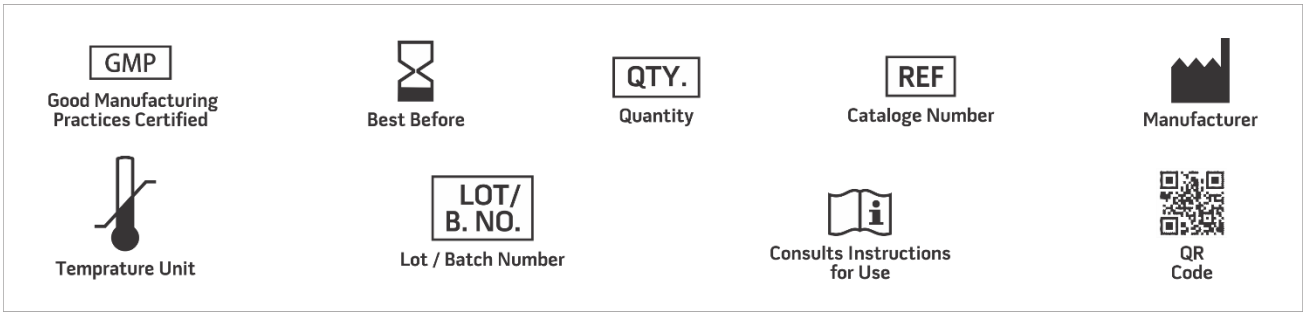
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided 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. MacFaddin J.F., 1985, Media for Isolation - Cultivation - Identification - Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.



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

***For Lab Use Only**
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