TM 2181 - M- DEXTROSE TRYPTONE BROTH

INTENDED USE

For detection and cultivation of thermophilic flat sour microorganisms from food preparations using membrane filter technique.

PRODUCT SUMMARY AND EXPLANATION

Bacillus species includes many thermophilic bacteria which can enter milk from various sources like farm or from poorly cleaned equipments in the processing plant. These bacteria grow rapidly in milk or other dairy products that are held at high temperature for long periods. Flat-sour spoilage is sour spoilage of food products without formation of gas. Dextrose Tryptone Agar can be modified into M-Dextrose Tryptone Broth. It is used for cultivation of variety of microorganisms and thus called non-selective medium used M-Dextrose Tryptone Broth is used by Olson et al for determining total counts on samples of milk passed through welded milk lines.

COMPOSITION

Ingredients	Gms / Ltr
Dextrose	10.000
Bromo cresol purple	0.040
Casein enzymic hydrolysate	20.000

PRINCIPLE

Essential growth nutrients are supplied by casein enzymic hydrolysate. Dextrose is the fermentable carbohydrate Bromocresol purple acts as the pH indicator, dextrose leads to the acid production which change color change the medium from purple to yellow. Test samples are filtered through membranes and then placed on membranes saturated with M-Dextrose Tryptone Broth and incubated at 55°C in sealed Petri plates. This is used for the detection and enumeration of thermophilic flat-sour sporulating organisms.

INSTRUCTION FOR USE

- Dissolve 30.04 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense as desired and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to light green homogeneous free flowing powder
Appearance of prepared medium : Purple colored clear solution without any precipitate
pH (at 25°C) : 6.7 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

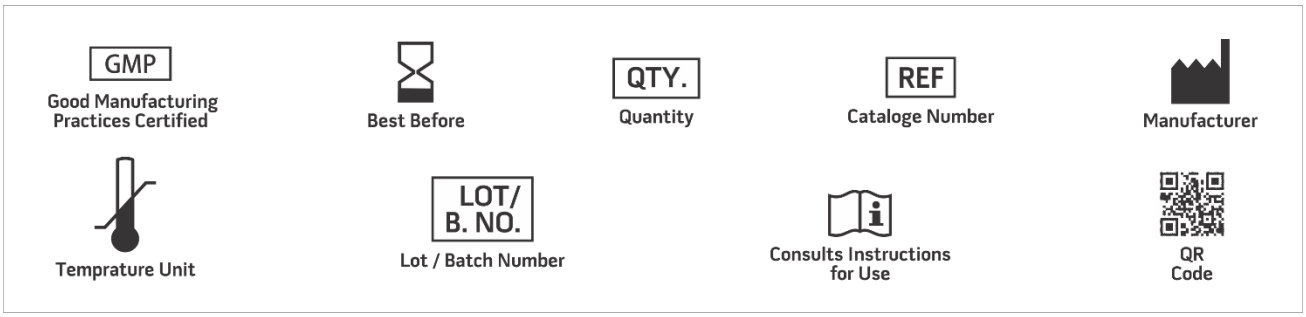
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacillus stearothermophillus	7953	50-100	Luxuriant	>=70%	55ºC	36-48 Hours

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. Olson, Brown and Mickle, 1960, J. Milk and Food Tech., 23:86.
2. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williamsand 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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