

## TM 1609 - SLANETZ AND BARTLEY MEDIUM W/O TTC

### INTENDED USE

For detection and enumeration of faecal Streptococci by membrane filtration technique.

### PRODUCT SUMMARY AND EXPLANATION

Slanetz and Bartley Medium was originally devised by Slanetz and Bartley for the detection and enumeration of Enterococci by membrane filtration technique. It can be also used as a direct plating medium. Media formulation is devoid of triphenyl tetrazolium chloride that is present in.

The Department of Health has recommended similar medium with TTC to be used for enumeration of Enterococci in water supplies.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptose	20.000
Yeast extract	5.000
Dextrose (Glucose)	2.000
Disodium hydrogen phosphate	4.000
Sodium azide	0.400
Agar	15.000

### PRINCIPLE

Tryptose and yeast extract serves as the source of essential nutrients to the organisms. The medium is highly selective for Enterococci. Sodium azide has inhibitory effect on gram-negative organisms. If Triphenyl Tetrazolium Chloride(TTC) is added to the medium, it is reduced to the insoluble formazan inside the bacterial cell forming dark red-coloured colonies. When the medium is incubated at higher temperature (44-45°C), all red or maroon colonies can be considered as presumptive Enterococci.

### INSTRUCTION FOR USE

- Dissolve 46.4 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely, do not autoclave or overheat.
- Excessive heating is detrimental.
- If desired add sterile 1% TTC solution to the medium.

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
- Appearance of prepared medium** : Light yellow coloured clear to slightly opalescent gel forms in Petri plates.
- pH (at 25°C)** : 7.2±0.2

### INTERPRETATION

Cultural characteristics observed after an incubation with added TTC solution.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	0%	-	35-37°C	18-48 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	$\geq 50\%$	Red or maroon	35-37°C	18-48 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.

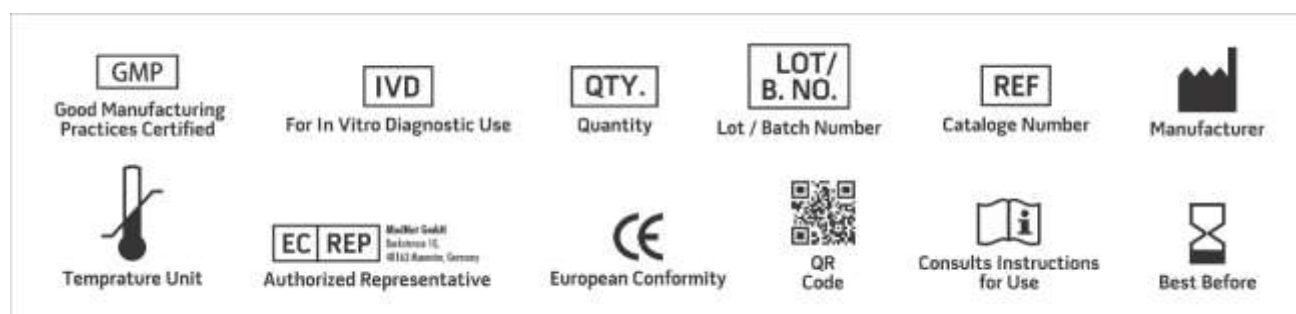
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

- Burkwall M.K. and Hartman P.A., 1964, Appl. Microbiol., 12:18.
- Department of Health and Social Security, 1982, Report 71, HMSO, London.
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- Mead G.C., 1966, Proc. Soc. Wat. Treat. Exam.,15:207.
- Nordic Committee on Food Analysis, 1968, Leaflet 68.
- Slanetz L. W. and Bartley C.H., 1957, J. Bact., 74:591.
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**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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