

# TM 729 – ENTEROCOCCUS PRESUMPTIVE BROTH

### **INTENDED USE**

For detection of Enterococci in water and other materials of sanitary importance.

#### PRODUCT SUMMARY AND EXPLANATION

Enterococcus Presumptive Broth is formulated by Sandholzer and Winter for the detection of Enterococci in water supplies, swimming pools, sewage etc. Enterococci are differentiated from other Streptococci by their ability to grow in 6.5% sodium chloride, at pH 9.6 and at 10°C and 45°C.

## **COMPOSITION**

Ingredients	Gms / Ltr		
Casein enzymic hydrolysate	5.000		
Yeast extract	5.000		
Dextrose	5.000		
Sodium azide	0.400		
Bromothymol blue	0.032		

## **PRINCIPLE**

The medium consists of Casein enzymic hydrolysate, yeast extract, dextrose which provide essential growth nutrients for Enterococci. Sodium azide inhibits gram-negative organisms. The positive presumptive tests are confirmed by inoculating from Enterococcus Presumptive Broth to Enterococcus Confirmatory slant-broth combination prepared with an Azide Agar medium (Enterococcus Confirmatory Agar) overlaid with a Salt Azide Penicillin Broth (Enterococcus Confirmatory Broth). A negative catalase test is considered confirmed positive evidence of the presence of Enterococci. Single strength medium can be used for small inoculum. Production of acid and turbidity in an azide presumptive broth when incubated at 45°C is considered positive presumptive evidence for the presence of Enterococci which is confirmed by inoculating on Confirmatory Broth/ Agar.

### **INSTRUCTION FOR USE**

- Dissolve 15.43 grams in 1000 ml purified / distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in 100 ml quantities in tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Warning: Sodium azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

#### **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)** :  $8.4 \pm 0.2$ 

## **INTERPRETATION**

Cultural characteristics observed after incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	Good- luxuriant	-	45°C	18-24 Hours
Escherichia coli	25922	>=10³	Inhibited	Positive reaction, yellow colour	45°C	18-24 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.

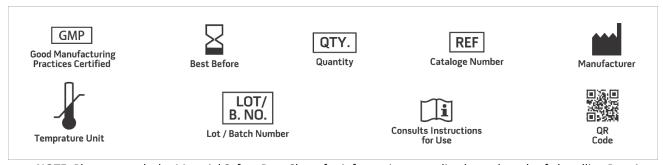
**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

## **DISPOSAL**

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

## **REFERENCES**

- 1. Sandholzer and Winter, 1946, Commercial Fisheries Leaflet T1a
- 2. Eaton A. D., Clesceri L. S. and Greenberg A. E., (Ed.), 1998, Standard Methods for the Examination of Water and Wastewater, 20th Ed., American Public Health Association, Washington, D.C.



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

\*For Lab Use Only
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