TM 546 - SOYABEAN BILE BROTH BASE

INTENDED USE

For enrichment and isolation of *Escherichia coli* 0157:H7 from foods.

PRODUCT SUMMARY AND EXPLANATION

Soyabean Bile Broth Base is formulated as recommended by FDA for the enrichment and isolation of *E. coli* O157:H7. Whenever low levels of *E. coli* O157:H7 are suspected, the food is enriched in Soyabean Bile Broth and further plated on selective medium as Sorbitol MacConkey Agar or Hemorrhagic coli (HC) Agar for isolation and identification.
Blend 25 gm food sample to be tested in 224 ml Soyabean Bile Broth and incubate with shaking (about 100 rpm) at 37°C for 18-24 hours. Prepare dilution of the enrichment culture with phosphate buffer and spread 0.1 ml of each dilution on HC Agar or Sorbitol MacConkey Agar plates and incubate at 43°C for 24 hours.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Soya peptone	3.000
Bile salts mixture	1.120
Dextrose (Glucose)	2.500
Sodium chloride	5.000
Dipotassium hydrogen phosphate	4.000

PRINCIPLE

Tryptone and soya peptone provide carbonaceous, nitrogenous compounds and other essential growth nutrients. Dextrose is the fermentable carbohydrate and energy source. Bile salts mixture inhibits gram-positive bacteria. Sodium chloride maintains osmotic equilibrium while phosphate buffers the medium well. Novobiocin renders the medium selectivity.

INSTRUCTION FOR USE

- Dissolve 32.62 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of Novobiocin Selective Supplement.
- If desired, aseptically add rehydrated contents of 1 vial of EC O157: H7 Selective Supplement for isolation of *Escherichia coli* O157 from foods.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured clear solution.
pH (at 25°C) : 7.3±0.2

INTERPRETATION

Cultural characteristics observed after an incubation with added Novobiocin Selective Supplement and if desired EC O157: H7 Selective Supplement.

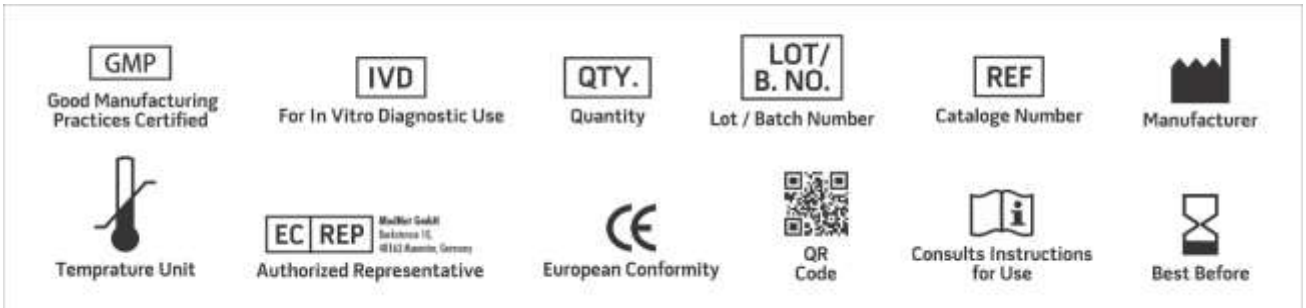
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Escherichia coli	12900	50-100	Good-luxuriant	35-37°C or 41.5 °C	18-48 Hours
Escherichia coli	25922	50-100	Good	35-37°C or 41.5 °C	18-48 Hours
Staphylococcus aureus	25923	>=10^3	None	35-37°C or 41.5 °C	18-48 Hours
Enterococcus faecalis	29212	>=10^3	None	35-37°C or 41.5 °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
1. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, D.C.



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