

## CM 22099 - SOYABEAN BILE BROTH W/ NOVOBIOCIN (ISO 16654:2001)

### INTENDED USE

For the detection and enrichment of Escherichia coli O157:H7 from foods.

### PRODUCT SUMMARY AND EXPLANATION

Soyabean Bile Broth W/ Novobiocin is used for the detection and enrichment of Escherichia coli O157:H7 from foods. E. coli O157:H7 infection often causes severe bloody diarrhea and abdominal cramps. This medium is formulated as recommended in FDA, for the enrichment and isolation of Escherichia coli O157:H7. This culture medium complies with the specifications given by ISO 16654:2001.

### COMPOSITION

Ingredients	Gms / Ltr
Casein enzymatic hydrolysate	17.000
Sodium chloride	5.000
Dipotassium hydrogen phosphate	4.000
Papaic digest of soyabean meal	3.000
Dextrose	2.500
Bile salts mixture	1.500
Novobiocin	0.020

### PRINCIPLE

The medium consists of Casein enzymatic hydrolysate and Soyabean meal which acts as the nitrogen and carbon source in the medium. Dextrose is a source of fermentable carbohydrates for energy production. Sodium chloride maintains the osmotic balance and Dipotassium phosphate provides buffering capacity in the medium. Bile salts mixture inhibits gram-positive bacteria. Novobiocin is used as selective agents to inhibit bacterial growth.

### INSTRUCTION FOR USE

- Dissolve 33.02 grams in 1000 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense into tubes.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes
- Cool to 45-50°C before use.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	: Cream to yellow, homogeneous free flowing powder
Appearance of Prepared medium	: Light yellow colored, clear solution
pH (at 25°C)	: 7.3 ± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period



Escherichia coli O157:H7	35150	50-100	Luxuriant	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	35-37°C	18-24 Hours
Enterococcus faecalis	29212	≥1000	Inhibited	35-37°C	18-24 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	35-37°C	18-24 Hours

#### PACKAGING

In 500g packaging size.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers 10-25°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.

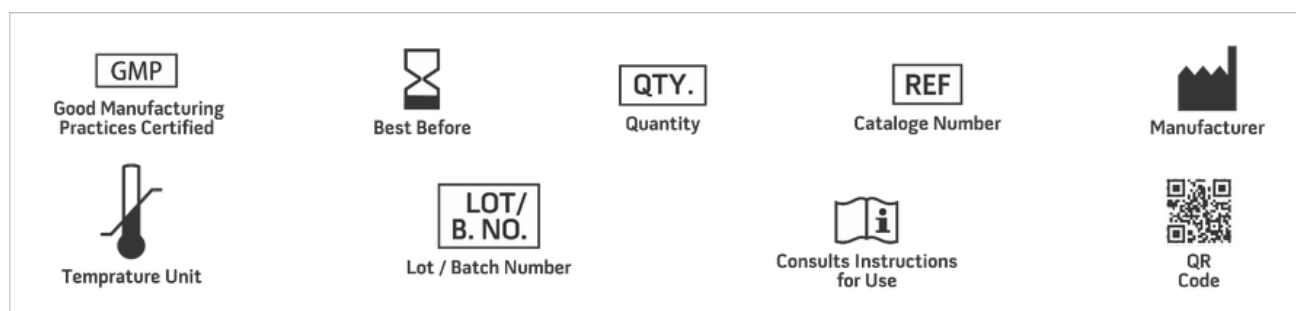
Product Deterioration: Do not use, if powder shows evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

1. MacFaddin J. F., Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, (1985).
2. Williams & Wilkins, Baltimore, M.d. The United States Pharmacopeia, USP31/NF26, The United States Pharmacopeial Convention, Rockville, MD. (2008).
3. U.S. FDA. Center for Food Safety & Applied Nutrition. Food pathogenic microorganisms and natural toxins handbook. Escherichia coli O157:H7. College Park, MD. (2001).



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

\*For Lab Use Only

