

## TM 1829-LAURYL SULPHATE TRYPTOSE BROTH, MODIFIED (ISO 22964:2006)

### INTENDED USE

For the selective pre-enrichment medium for *Cronobacter sakazakii* from milk and milk products.

### PRODUCT SUMMARY AND EXPLANATION

Lauryl Sulphate Tryptose Broth, Modified is used for the selective enrichment of *Cronobacter sakazakii*. *C. sakazakii* is currently considered an emerging pathogen responsible for unweaned babies, risking severe meningitis and necrotic enterocolitis that can be the cause of a mortality rate between 40 and 80%.

*Enterobacter* species are widely distributed in nature occurring in fresh water, soil sewage, plants, vegetables, animal and human faeces. *Cronobacter sakazakii*, a gram-negative rod. Modified Lauryl Sulphate Tryptose Broth is recommended for pre-enrichment of *Cronobacter sakazakii* and is in accordance with ISO specifications.

### COMPOSITION

Ingredients	Gms / Ltr
Sodium chloride	34.000
Enzymatic digest of Plant and Animal tissue	20.000
Lactose	5.000
Dipotassium hydrogen phosphate	2.750
Potassium dihydrogen phosphate	2.750
Sodium Lauryl sulphate	0.100

### PRINCIPLE

Enzymatic digest of Plant and Animal tissue provides the nitrogen, carbon compounds, vitamins and amino acids. Lactose is the fermentable sugar. Sodium chloride maintains the osmotic balance of the medium. Potassium phosphates controls the pH during fermentation of Lactose. Sodium lauryl sulphate inhibits organisms other than coliforms

### INSTRUCTION FOR USE

- Dissolve 64.60 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C.
- aseptically add rehydrated contents of vial of Vancomycin Supplement (TS 280)
- Mix well and dispense into tubes.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow colour, Homogeneous free flowing powder
Appearance of Prepared medium	:	Light yellow coloured, clear solution without any precipitate
pH (at 25°C)	:	6.8± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation with addition of w Vancomycin supplement after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
<i>Cronobacter sakazakii</i> *	12868	50-100	Good- Luxuriant	44°C	24 hours
<i>Enterobacter aerogenes</i>	13048	50-100	Good- Luxuriant	44°C	24 hours
<i>Escherichia coli</i>	25922	50-100	Good- Luxuriant	44°C	24 hours
<i>Enterococcus faecalis</i>	29212	≥1000	Inhibited	44°C	24 hours
<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	44°C	24 hours

\*Formerly known as *Enterobacter sakazakii*

#### PACKAGING:

In 500 gm packaging size.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 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 show 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

- Muytjens H. L., Zanen H. C., Sonderkamp H. J. et al., 1983, J. Clin.Microbiol., 18 : 115-120.
- International Organization for Standardization Draft ISO/TS 22964: 2006 (E).
- Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

\*For Lab Use Only

Revision: 9<sup>th</sup> July 2020