

TM 549 -TRYPTONE SOYA YEAST EXTRACT BROTH (ISO 11290-2:1998)

INTENDED USE

For isolation and cultivation of *Listeria* spp. from Henry's light.

PRODUCT SUMMARY AND EXPLANATION

Tryptone Soya yeast extract broth is recommended by the ISO Committee for the cultivation and maintenance of a wide variety of heterotrophic microorganisms. It is formulated as per APHA for the isolation and cultivation of *Listeria monocytogenes*. The composition & performance criteria of this medium are as per the specifications laid down in ISO 11290-2: 1998.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	17.000
Yeast extract	6.000
Sodium chloride	5.000
Soya peptone	3.000
Dipotassium phosphate	2.500
Glucose monohydrate	2.500

PRINCIPLE

The medium contains Tryptone, Soya peptone and Yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Glucose is the fermentable carbohydrate which helps in providing carbon and energy sources. Dipotassium phosphate acts as a buffer system. Sodium chloride supplies the essential electrolytes for transport & osmotic balance. For isolation of *Listeria monocytogenes* from dairy samples, the FDA recommends enriching and incubating the samples to be tested at 30°C for 24-48 hours.

INSTRUCTION FOR USE

- Dissolve 36.00 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense into tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Cream to yellow colour, homogeneous free flowing powder
Appearance of Prepared medium	:	Yellow coloured, 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
<i>Listeria monocytogenes</i>	19117	50-100	Luxuriant	30-37°C	24-48 Hours



<i>Listeria monocytogenes</i>	19118	50-100	Luxuriant	30-37°C	24-48 Hours
<i>Listeria monocytogenes</i>	19111	50-100	Luxuriant	30-37°C	24-48 Hours

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

1. Atlas R. M. 2004, 3rd Ed., Handbook of Microbiological Media, Parks, L.C. (Ed.), CRC Press, Boca Raton.
2. FDA, Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC
3. Corry J. E. L., Curtis G. D. W., and Baird R. M., Culture Media for Food Microbiology, Vol. 34, Progress in Industrial Microbiology, Elsevier, Amsterdam. (1995).
4. UNE-EN-ISO 11290-1 Microbiology of food and animal feeding stuff. Horizontal method for the detection and enumeration of *Listeria monocytogenes*. Part. 1: Detection method. Amendment 1: Modification of the isolation media and the haemolysis test and inclusion of precision data.

 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: 9th July 2020