55309 Tryptone soya yeast extract broth ISO 11290-2:1998 (TSYEB)

Tryptone Soya Yeast Extract Broth is recommended for confirmation of *Listeria* in Henrys light.

Composition:

Ingredients	Grams/Litre
Casein enzymic hydrolysate	17.0
Papaic digest of soyabean meal	3.0
Sodium chloride	5.0
Dipotassium hydrogen phosphate	2.5
Dextrose	2.5
Yeast extract	6.0
Final pH 7.3 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-8°C.
Appearance: Light brown-yellow coloured, homogeneous, free flowing powder.
Color and Clarity: Yellow coloured, clear solution.

Directions:

Suspend 36 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation:

Tryptone soya yeast extract broth is formulated as recommended by ISO for the cultivation and maintainance of a wide varity of heterothrophic microorganisms (1, 3). APHA recommend the media for the isolation and cultivation of *Listeria monocytogenes* (2). For isolation of *Listeria monocytogenes* from dairy products the FDA (4) recommends an enrichment procedure where the sample is inoculated in TSYEB and incubated at 30°C for 24-48 hours.
Casein enzymic hydrolysate and papaic digest of soyabean meal provide amino acids and other complex nitrogenous
compunds. Yeast extract serves as a nitrogen source and provides other important nutrients like e.g. vitamin B12 complex. Dextrose is the fermentable sugar and is the energy source. Dipotassium hydrogen phosphate is the buffering agent to stabilize the pH.

Cultural characteristics after 24-48 hours at 30-37°C (Inoculum 50-100 cfu).

Organisms (ATCC)	Growth
Listeria monocytogenes (19117)	+++
Listeria monocytogenes (19111)	+++
Listeria monocytogenes (19118)	+++

References:
1. ISO 11290-2:1998 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection and enumeration of Listeria monocytogenes -- Part 2: Enumeration method
2. Vanderzant C. and Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington, D.C.
3. Atlas R. M. 2004, 3rd Ed., Handbook of Microbiological Media, Parks, L.C. (Ed.), CRC Press, Boca Raton.
4. FDA, Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.Taylor W. I., 1961, Appl. Microbiol., 9:487.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.