

Specification

Liquid culture medium for the enrichment and detection of *Listeria ssp.* according to ISO standards.

Presentation

5 Prepared Bags /2L
Bags 2000 ml
with: 2000 ± 15 ml

Packaging Details

1 box with 5 bags of 2L.
PVC plasticizer free sterile bag with: 1 vial stopper +
1 penetrable cap.
Dimensions: 18 x 32 cm. For use in food testing.

Shelf Life

12 months

Storage

2-25°C

Composition

Composition (g/l):

Peptone from meat.....	5.000
Casein peptone.....	5.000
Yeast extract.....	5.000
Meat extract.....	5.000
Sodium chloride.....	20.000
Disodium phosphate.....	12.000
Monopotassium phosphate.....	1.350
Esculin.....	1.000
Lithium chloride.....	3.000
Ammonium ironIII citrate.....	0.500
Nalidixic ac.....	0.010
Acriflavine.....	0.0125

Description /Technique

Description

Half Fraser Broth is a modification of Fraser Broth which contains half of the concentration of nalidixic acid and acriflavine to aid in the recovery of stressed cells.

Half Fraser Broth is used as the primary enrichment broth according to the EN ISO 11290 for the detection of *Listeria*.

Technique

For the inoculation of bags follow the standard laboratory method or the applicable norms, (Stab inoculation, loop inoculation, dilution banks , etc ...).

The use methodology is described in the EN ISO 11290.

Each Bag is intended for use with an automatic dispenser in laboratories requiring large volumes of broth media or diluent. Discard any partially used bag to avoid contamination.

The bag has multiple connection points: 1 penetrable cap (injection port) latex-free polycarbonate, for any additive injection required. And an injection (vial stopper) to connect to any standard equipment laboratory dosing with a connector.

Once completely empty, the bag can be disposed of along with normal plastic (PVC).

Note:The medium can show the possible presence of precipitates not affecting its correct performance.

Quality control

Physical/Chemical control

Color : Brown-yellowish pH: 7.2 ± 0.2 at 25°C

Microbiological control

Prepare Tubes - Inoculate with 100±20 CFU for Growth Promotion or 10⁴-10⁶ CFU for Selectivity
Microbiological control according to ISO 11133:2014/ Adm 1:2018.

Aerobiosis. Incubation at 30 ± 1 °C during 18-24 h

Microorganism

Escherichia coli ATCC® 8739 (1)

Enterococcus faecalis ATCC® 19433 (2)

Listeria monocytogenes ATCC® 13932, WDCM 00021 + (1) + (2)

Listeria monocytogenes ATCC® 35152, WDCM 00109 + (1) + (2)

Growth

Inhibited. Confirm in TSA at 37°C±1 reading 24 ± 3h

Partial Inhibition. Confirm in TSA at 37°C±1 reading 24 ±

≥ 10 CFU. Blue-green coln. w. opaque halo (Ottaviani

≥ 10 CFU. Blue-green coln. w. opaque halo (Ottaviani

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

Bibliography

- ATLAS, R.M. (1993) Handbook of Microbiological Media. CRC Press. Boca Raton. Florida.
- FRASER, J.A. & W.H. SPERBER (1988) Rapid detection of *Listeria* spp. In food and environmental samples by esculin hydrolysis. J. Food Prot. 51:762-765.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 11290-1:2017 Standard. Microbiology of the food chain. Horizontal method for the detection and enumeration of *Listeria monocytogenes* and for *Listeria* spp.- Part 1: Detection Method
- ISO 11290-2:2017 Standard. Microbiology of the food chain. Horizontal method for the detection and enumeration of *Listeria monocytogenes* and for *Listeria* spp.- Part 2: Enumeration Method.
- McCLAIN, D. & W.H. LEE (1988) Development of a USDA-FSIS method for isolation of *Listeria monocytogenes* from raw meat and poultry. J.AOAC 71:660-664.
- VANDERZANT, C & D.F. SPLITTSTOESSER (1992) Compendium of methods for the microbiological examination of foods. APHA. Washington. DC.