



Reference: 4053

**Technical Data Sheet**Product: **LISTERIA ENRICHMENT BROTH HALF FRASER ISO  
11290-1****Specification**Broth for the selective enrichment of *Listeria monocytogenes***Presentation**20 Tubes  
Tube 16 x 113 mm  
with: 9 ± 0,1 ml**Packaging Details**1 box with 20 tubes, 16x113 mm glass tubes, ink  
labelled and metal-Non injectable cap..**Shelf Life**

12 months

**Storage**

2-25°C

**Composition**

Composition (g/l):

|                               |         |
|-------------------------------|---------|
| Peptone from meat.....        | 5.0000  |
| Casein Peptone.....           | 5.0000  |
| Yeast extract.....            | 5.0000  |
| Meat extract.....             | 5.0000  |
| Sodium chloride.....          | 20.0000 |
| Disodium phosphate.....       | 12.0000 |
| Monopotassium phosphate.....  | 1.3500  |
| Esculin.....                  | 1.0000  |
| Lithium chloride.....         | 3.0000  |
| Ammonium ironIII citrate..... | 0.5000  |
| Nalidixic ac.....             | 0.0100  |
| 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 bottles, 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.

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 controlInoculate: Practical range 100 ± 20 CFU; Min. 50 CFU (Productivity)/ 10<sup>4</sup>-10<sup>6</sup> (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 ±

&gt; 10 CFU. Blue-green coln. w. opaque halo (Ottaviani)

&gt; 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



Reference: 4053

Technical Data Sheet

Product: LISTERIA ENRICHMENT BROTH HALF FRASER ISO  
11290-1

## 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. SPLITTOESSER (1992) Compendium of methods for the microbiological examination of foods. APHA. Washington. DC.