

# TECHNICAL DATA SHEET

Article No. 9654

Half Fraser Broth ISO

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## SPECIFICATION

Prepared medium. Liquid culture medium for the enrichment and detection of *Listeria ssp.* according to ISO 11290.

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

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## COMPOSITION IN G/ L

Peptone from meat	5.00
Casein Peptone	5.00
Yeast extract	5.00
Meat extract	5.00
Sodium chloride	20.00
Disodium phosphate	12.00
Monopotassium phosphate	1.35
Esculin	1.00
Lithium chloride	3.00
Ammonium ironIII citrate	0.50
Nalidixic ac	0.01
Acriflavine	0.0125

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## PACKAGE DETAILS

9654-10x225ML

Volume 225 ± 5 ml  
Bottle size 250 ml  
Packaging unit 10 bottles

1 box with 10 x 225 ml in 250-ml-bottles. Injectable cap: Plastic screw inner cap. For the use of syringe needles with a diameter ≤ 0.8 mm.



**9654-20x9ML**

Volume	9 ± 0.1 ml
Tube size	16 x 113 mm
Packaging unit	20 tubes

1 box with 20 x 9 ml in 16x113 mm glass tubes. Ink labelled, metal-non injectable cap.

## 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 used methodology is described in the EN ISO 11290.

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

## MICROBIOLOGICAL CONTROL

Inoculate: 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/A1:2018.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020

Aerobiosis. Incubation at 30 ± 1 °C during 24 ± 2 h

Microorganism	Growth
<i>Escherichia coli</i> ATCC® 8739 (1)	Inhibited. Confirm in TSA at 37°C±1 reading 24 ± 3h
<i>Enterococcus faecalis</i> ATCC® 19433 (2)	Partial Inhibition. Confirm in TSA at 37°C±1 reading 24 ± 3h.
<i>Listeria monocytogenes</i> ATCC® 13932, WDCM 00021 + (1) + (2)	> 10 CFU. Blue-green coln. w. opaque halo (Ottaviani Agosti)
<i>Listeria monocytogenes</i> ATCC® 35152, WDCM 00109 + (1) + (2)	> 10 CFU. Blue-green coln. w. opaque halo (Ottaviani Agosti)



#### 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.

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## REFERENCES

- 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.

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## STORAGE

2 - 25 °C

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## SHELF LIFE

12 months unopened from date of manufacture

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updated: 07.03.2023

