

HALF FRASER BROTH (90 ML)

INTENDED USE:

Half-Fraser Broth is used for the selective and differential enrichment of *Listeria monocytogenes* in milk and dairy products, as well as in other food products which may contain it.

PRINCIPLE AND INTERPRETATION:

The broth contains a rich nutritive base, consisting of a mixture of peptones, and a buffer that maintains the pH close to neutral to favor the growth of the main species of *Listeria*. The broth is made selective by the incorporation of lithium, actiflavin and nalidixic acid . Therefore, it is particularly efficient for products with a high concentration of microbes . The formulation of Half-Fraser (half concentration in antibiotics and acriflavin) has been developed to limit the selective capacity of the original medium , in order to allow better growth of stressed *Listeria*.

COMPOSITION:

Ingredients	Gr/Liter
Proteose peptone	5 gr
Tryptone	5 gr
Lab-Lemco' powder	5 gr
Yeast extract	5 gr
Sodium chloride	20gr
Di-sodium hydrogen phosphate	12 gr
Potassium dihydrogen phosphate	1,35 gr
Aesculin	1 gr
Lithium chloride	3 gr

HALF FRASER SUPPLEMENT:

Ingredients	Per vial
Ferric ammonium citrate	1.125g
Nalidixic acid	22.5mg
Acriflavine hydrochloride	28.125mg

***Formula adjusted, standardized to suit performance parameters

pH: 7,2 ± 0,2

PRECAUTIONS:

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration or other signs of deterioration.

TEST PROCEDURE:

It has been found that Half-Fraser Broth is not suitable for the enrichment of some strains of *Listeria grayi*. This non-pathogenic species is mainly found in soil and is rarely isolated from food samples Examine the plates for characteristic *Salmonella* colonies.

QUALITY CONTROL:
1.Sterility Control:

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Physical/Chemical Control

pH: 7,2 ± 0,2

Apperance: Straw opalescent

3.Microbiological Control: Incubation at a temperature of 35±2 °C:24 h observed after 24±3 hours.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
<i>Listeria monocytogenes</i> ATCC 19114	10-100	Good	Blackening
<i>Escherichia coli</i> ATCC 25922	100-1000	Inhibition	Inhibition
<i>Enterococcus faecalis</i> ATCC 29212	100-1000	Inhibition	Inhibition

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 01112

Content/Packaging: Screw cap x 20 piece /box

REFERENCES:

1. Fraser J.A. and Sperber W.H. (1988) J. Food Protect. 51, No.10, 762-765.
2. McClain D. and Lee W.H. (1988) J. Assoc. Off. Anal. Chem. 71, NO.3, 660-664.
3. Cowart R.E. and Foster B.G. (1985) J. Infect. Dis. 151, 721-730.
4. Partis L., Newton K., Marby J. and Wells R.J. (1994) Appl. Env. Microbiol. 60, 1693-1694.
5. Microbiology of Food and Animal Feeding Stuffs - Horizontal method for the detection and enumeration of *Listeria monocytogenes* Part. 1: Detection Method BS EN ISO 11290:1 1997.



Aseptic Sterile



Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature
Limitation



Do not reuse



Contains sufficient
for <n> tests



Look at user manual



Manufacturer