B1413	LISTERIA FRASER BROTH BASE, HALF CONCENTRATION
Formula	
Ingredients:	**gms/lit.**
Proteose Peptone	5.00
Tryptone	5.00
Yeast extract	5.00
Meat extract B#	5.00
Sodium chloride	20.00
Disodium hydrogen phosphate	9.50
Potassium Dihydrogen phosphate	1.35
Aesculin	1.00
Lithium Chloride	3.00
Nalidixic acid	0.010
Acriflavine hydrochloride (Trypaflavine)	0.0125
# Equivalent to Beef Extract	
Final pH (at 25°C): 7.2 + 0.2	

Directions:

Suspend 27.4 gms. in 500ml. distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to room temperature and add the contents of one vial of Fraser Supplement (BF002). Mix well and pour into sterile tubes or plates.

Principle:

This medium contains tryptone, yeast extract and beef extract which provide essential nutrients like carbon and nitrogenous compounds including vitamins, amino acids and trace ingredients. Phosphates provide buffering action to the medium while sodium chloride maintains osmotic equilibrium. Nalidixic acid and acriflavine inhibits the growth of gram – negative and gram – positive organisms respectively except Listeria species.

QC Tests – (I)Dehydrated Medium		
	Colour:	Cream to light yellow
	Appearance:	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating):	7.2 ± 0.2
	Colour (post autoclaving/heating):	Yellow coloured solution with bluish tinge
	Clarity (post autoclaving/heating):	Clear to slightly opalescent
(III) Q.C. Test Microbiological		

Cultural characteristics observed after 24-48 hours at 35- 37°C.

MICROORGANISM (ATCC)	GROWTH	ESCULIN HYDROLYSIS*
Listeria monocytogenes (19118)	Luxuriant	+
Staphylococcus aureus (25923)	Inhibited	-
Escherichia coli (25922)	Inhibited	-
Enterococcus faecalis (29212)	Inhibited	-

Key: + = blackening of medium
* = subcultured on Listeria selective agar

Precautions :	1. For Laboratory Use.
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

Refer disclaimer Overleaf

Use:	For selective enrichment of Listeria species as per ISO11290-1:1997 & ISO11133-2:2003				
Storage:	Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.				
Packing:	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1413	54.8 g/l	9.12 lit	7.2 ± 0.2	Fraser supplement (BF002)	121^0C/15 min