

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B1333	HALF FRASER BROTH BASE	
Formula		
Ingredients:	gms/lit.	
Peptone	5.00	
Tryptone	5.00	
Yeast extract	5.00	
Meat Extract B#	5.00	
Sodium chloride	20.00	
Disodium hydrogen phosphate	9.60	
Potassium Dihydrogen phosphate	1.35	
Aesculin	1.00	
Lithium Chloride	3.00	
Nalidixic acid	0.010	
Acriflavin hydrochloride	0.0125	
# - Equivalent to Beef extract		
Final pH (at 25°C) : 7.2± 0.2		
Directions :		
Suspend 54.97 grams in 1000 ml distilled water. Heat if necessary, to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add rehydrated contents of 2 vials of Fraser Supplement (BF002). Mix well and dispense as desired.		
Principle :		
This medium contains peptone, tryptone, yeast extract and Meat Extract B 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 acriflavin 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	
Clarity (post autoclaving/heating) :	Clear	
(III) Q.C. Test Microbiological		
Cultural characteristics observed on addition of BF002 after an incubation at 35 - 37°C for 24-48 hours.		
MICROORGANISM (ATCC)	GROWTH	ESCULIN HYDROLYSIS*
Listeria monocytogenes (19111)	good-luxuriant	positive reaction, blackening of medium
Listeria monocytogenes (19112)	good-luxuriant	positive reaction, blackening of medium
Listeria monocytogenes (19117)	good-luxuriant	positive reaction, blackening of medium
Listeria monocytogenes (19118)	good-luxuriant	positive reaction, blackening of medium
Staphylococcus aureus (25923)	none-poor	-
Escherichia coli (25922)	Inhibited	-
Enterococcus faecalis (29212)	none-poor	-
Key:* = 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.	
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	
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Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1333	54.8 g/l	9.095 lit	7.2 ± 0.2	Fraser supplement (BF002)	121°C/15 min