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TECHNICAL SHEET

B1334 FRASER BROTH	
Formula	
Ingredients:	Gms/lit.
Casein enzymic hydrolysate	5.00
Proteose peptone	5.00
Yeast extract	5.00
Meat extract	5.00
Sodium chloride	20.00
Lithium chloride	3.00
Disodium hydrogen phosphate	12.00
Potassium dihydrogen phosphate	1.35
Esculin	1.00
Ferric ammonium citrate	0.50
Final pH (at 25°C): 7.2 <u>+</u> 0.2	

Directions:

Suspend 58.00 gms.in 990 ml. distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121° C) for 15 minutes. Cool to $45-50^{\circ}$ C & aseptically add rehydrated contents of 1 vl.of Fraser Listeria Supplement OR Fraser Enrichment Supplement. Mix thoroughly & dispense as desired.

Principle:

Casein enzymic hydrolysate, beef extract andYeast extract provide nitrogen, vitamins and minerals. Sodium phosphate and potassium phosphate are buffering agents. Differentiation is aided by including ferric ammonium citrate in the final medium. Since all Listeria species hydrolyze esculin, the addition of ferric ions to the medium will detect the reaction.

Selectivity is provided by the presence of lithium chloride, nalidixic, acid and acriflavine in the formula. The high salt tolerance of Listeria is used as a means to inhibit growth of Enterococci.

QC	Tests - (I)Dehydrated Medium				
	Colour:	Cream to yellow			
	Appearance :	Homogeneous Free Flowing powder			
(II)Rehydrated medium				
	pH (post autoclaving/heating):	7.2 ± 0.2			
	Colour (post autoclaving/heating):	Light yellow to yellow			
	Clarity (post autoclaving/heating):	Clear solution with slightly precipitate			
(I]	II)Q.C. Test Microbiological				
Cultural characteristics observed after 24-48 hrs.at 35-37°C.					
	MICROORGANISM (ATCC)	GROWTH	ESCULIN HYDROLYSIS*		
	Listeria monocytogenes (19117)	Luxuriant	+		
	Enterococcus faecalis (29212)	Inhibited	-		
	Escherichia coli (25922)	Inhibited	-		
	Staphylococcus aureus (25923)	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.
- 3. HARMFUL. Irritating to eyes, respiratory system and skin. May cause harm to the unborn child. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed. Target organ(s): Blood, Kidneys, Nerves.

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Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.							
	Since Listeria species other than L. monocytogenes can grow on these media, an							
	identification of Listeria monocytogenes must be confirmed by biochemical and							
	serological testing.							
	3. Poor growth and a week esculin reaction may be seen after 40 hours incubation for some enterococci.							
Use :	For the isolation, cultivation and enrichment of Listeria monocytogenes from foods and environmental specimens.							
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.							
Packing:	500 gm. bottle							
Product profile:		Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization			
B1334	58g/l	8.62L	7.2 <u>+</u> 0.2		121°C / 15 minutes			
				Supplement				
				OR Fraser				
				Enrichment				

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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Rev: December 2020