

TECHNICAL SHEET

B1818	Gram Negative Broth		
Formula			
Ingredients :		gms/lit.	
Polypeptone peptone	20.00		
Dextrose	1.00		
Sodium citrate	2.00		
Sodium deoxycholate	0.50		
Dipotassium phosphate	4.00		
Monopotassium phosphate	1.50		
Sodium chloride	5.00		
Final pH (at 25°C) : 7.0 ± 0.2			
Directions :			
Suspend 34.00 grams in 1000 ml purified/ distilled water. Mix well and allow standing for 15 minutes. With continuous stirring bring gently to boil and maintain at boiling till completely dissolved. DO NOT AUTOCLAVE. Dispense in sterile test tubes or flasks as desired.			
Principle :			
GN Broth is recommended by the Indian Pharmacopoeia (1) for the selective isolation of Shigella species with subsequent isolation on a selective medium, XLD Agar. The medium contains polypeptone peptone, which provides amino acids and other nitrogenous substances to support bacterial growth. The combination of sodium citrate and sodium deoxycholate inhibit gram-positive and some gram-negative bacteria such as coliforms. Phosphates serve as a buffering system. Sodium chloride maintains osmotic equilibrium. Proteus, Pseudomonas and coliforms do not overgrow Salmonella and Shigella in GN Broth during the first 6 hours of incubation. This enrichment broth should be used in conjunction with selective and nonselective plating media to increase the probability of isolating pathogens.			
QC Tests – (I)Dehydrated Medium			
	Colour :	Cream to yellow	
	Appearance :	Homogeneous Free Flowing powder	
(II)Rehydrated medium			
	pH (post autoclaving/heating) :	7.0 ± 0.2	
	Colour (post autoclaving/heating) :	Light amber	
	Clarity (post autoclaving/heating) :	Clear to very slightly opalescent	
(III)Q.C. Test Microbiological			
	Cultural characteristics observed after inoculation in GN Broth and then subculture on XLD Agar and incubation at 30-35°C for 24-48 hours. .		
	MICROORGANISM (ATCC)	GROWTH	GRWOTH AFTER 24 HRS. Recovery on XLD Agar(B361)
	Shigella boydii ATCC 8700	good	red translucent
	Staphylococcus aureus ATCC 6538	inhibited	--
Precautions :			
1. For Laboratory Use.			
2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.			

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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.				
	2. Further isolation and biochemical tests must be carried out for confirmation				
Use :	For enrichment of Shigella from pharmaceutical products in accordance with Indian pharmacopoeia 2017.				
Storage :	Dehydrated medium- below 30 ° C Prepared mediums– Between 2 to 8°C.				
Packing :	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
	B1818	34g/l	14.705 L	7.0 ± 0.2	NIL

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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