

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B316	LACTOSE BROTH					
Formula						
Ingredients :		gms/lit.				
Peptic digest of animal tissue		5.00				
Beef extract		3.00				
Lactose		5.00				
Final pH (at 25°C) : 6.9 ± 0.2						
Directions :						
Suspend 13 grams in 1000 ml distilled water. Heat if necessary, to dissolve the medium completely. For larger inocula (10 ml or more), concentrated medium may be prepared to account for medium dilution by the inoculum. Dispense in tubes containing inverted fermentation vial (Durhams tube) as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.						
Principle :						
Lactose Broth contains Beef Extract and Peptic digest of animal tissue as carbon and nitrogen sources for general growth requirements. Lactose is a carbohydrate source. Examination of water, foods, ingredients and raw materials, for the presence of coliforms is one of the most common tests because of the relative ease and speed. The finding of coliforms demonstrates a failure of the process of water, food and milk. It is a valuable bacterial indicator for determining the extent of fecal contamination of surface waters or drinking water.						
QC Tests – (I) Dehydrated Medium						
Colour :		Cream to yellow				
Appearance :		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.9 ± 0.2				
Colour (post autoclaving/heating) :		Light to medium amber				
Clarity (post autoclaving/heating) :		Clear				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18- 48 hrs at 35-37°C.						
MICROORGANISM (ATCC)		GROWTH	GAS			
Enterobacter aerogenes (13048)		Luxuriant	+			
Escherichia coli (25922)		Luxuriant	+			
Pseudomonas aeruginosa (27853)		Luxuriant	-			
Enterococcus faecalis (29212)		Luxuriant	-			
Pseudomonas aeruginosa (9027)		Luxuriant	-			
Escherichia coli (8739)		Luxuriant	+			
Escherichia coli NTCC (9002)		Luxuriant	+			
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 the detection of coliform bacteria in water, foods, dairy products as per Standard Methods.				
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
B316	13 g/l	38.46 lit	6.9 ± 0.2	Nil	121°C/15 min	