

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B1066	HUGH LEIFSON MEDIUM					
Formula						
Ingredients :		gms/lit.				
Peptic digest animal tissue		2.00				
Sodium chloride		5.00				
Dipotassium phosphate		0.30				
Glucose		10.00				
Bromo thymol blue		0.05				
Agar		2.00				
Final pH (at 25°C) : 6.8 ± 0.2						
Directions :						
Suspend 19.35 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense into test tubes in duplicate for aerobic and anaerobic fermentation. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool the tubed medium in an upright position						
Principle :						
The medium contains a high concentration of carbohydrate and low concentration of peptic digest of animal tissue to avoid the possibility of an aerobic organism utilizing peptic digest of animal tissue and producing an alkaline condition which would neutralize slight acidity produced by an oxidative organism. Dipotassium phosphate promotes fermentation and acts as pH controlling buffer. Agar concentration enables the determination of motility and aids in distribution of acid throughout the tube produced at the surface of medium. Oxidative organisms produce acid in unsealed tube with little or no growth and no acid formation in sealed tube while fermentative organisms produce acid in both sealed and unsealed tubes.						
QC Tests - (I) Dehydrated Medium						
Colour :		Bluish green				
Appearance :		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.8 ± 0.2				
Colour (post autoclaving/heating) :		Greenish blue				
Clarity (post autoclaving/heating) :		Clear to slightly opalescent				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18- 48 hrs.at 35 -37°C.						
MICROORGANISM (ATCC)		SEALED (WITH OIL/PARAFFIN)	UNSEALED	MOTILITY		
Enterobacter aerogenes (13048)		AG	AG	+		
Escherichia coli (25922)		AG	AG	+		
Pseudomonas aeruginosa (27853)		A	-	+		
Salmonella typhi (6539)		AG	AG	+		
Shigella sonnei (25931)		A	A	-		
Key : A = acid production (yellow colour) G = gas production - = unchanged (green) or alkaline (blue)						
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 detecting aerobic and anaerobic breakdown of glucose.				
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
B1066	19.35 g/l	25.839 L	6.8 ± 0.2	Nil	121°C/15min.	