

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

BH612	MANNITOL SALT AGAR					
Formula						
Ingredients:		gms/lit.				
Peptic digest of casein		5.00				
Peptic digest of animal tissue		5.00				
Beef extract		1.00				
Sodium chloride		75.00				
D-Mannitol		10.00				
Phenol red		0.025				
Agar		15.00				
Final pH (at 25°C) : 7.4 ± 0.2						
Directions :						
Suspend 111.02 grams in 1000 ml purified/ distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes or as per validated cycle. Mix well & dispense as desired. This product contains 7.5% Sodium chloride as one of its ingredients. On repeated exposure to air and absorption moisture sodium chloride has tendency to form lumps, therefore storage in tightly closed containers in dry place away from bright light .						
Principle :						
The medium contains beef extract, pancreatic digest of casein and peptic digest of animal tissue which makes it very nutritious as they provide essential growth factors and trace nutrients. Many other bacteria except Staphylococci are inhibited by 7.5% sodium chloride. Mannitol is the fermentable carbohydrate fermentation of which leads to acid production, detected by phenol red indicator. S.aureus ferment mannitol and produce yellow coloured colonies surrounded by yellow zones. Coagulase-negative strains of S.aureus are usually mannitol non-fermenters and therefore produce pink to red colonies surrounded by red-purple zones.						
QC Tests – (I)Dehydrated Medium						
Colour :		Light yellow to pink				
Appearance :		Homogeneous Free Flowing powder				
(II)Rehydrated medium						
pH (post autoclaving/heating) :		7.4 ± 0.2				
Colour (post autoclaving/heating) :		Orangish red to red				
Clarity (post autoclaving/heating) :		Clear to slightly opalescent				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18 - 72 hours at 35 - 37°C.						
MICROORGANISM (ATCC)		GROWTH	COLOUR OF COLONY			
Staphylococcus aureus (25923)		Luxuriant	yellow/white colonies surrounded by yellow zone			
Staphylococcus epidermidis (12228)		Fair to good	Red			
Proteus mirabilis (12453)		None-poor	Yellow			
Escherichia coli (25922)		Inhibited	---			
Escherichia coli (NCTC9002)		Inhibited	---			
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 isolation of pathogenic Staphylococci from pharmaceutical products in accordance to microbial limit testing by harmonized system of USP/BP/EP/JP.				
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
BH612	111.02 g/l	4.50 L	7.4 ± 0.2	Nil	121°C/15min.	