BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B612	**MANNITOL SALT AGAR**
Formula	
Ingredients :	**gms/lit.**
Proteose peptone	10.00
Meat extract B#	1.00
Sodium chloride	75.00
D-Mannitol	10.00
Phenol red	0.025
Agar	15.00
#- Equivalent to Beef extract	
Final pH (at 25°C) : 7.4 ± 0.2	
Directions :	
Suspend 111gms. in1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Mix well & dispense as desired.	
Principle:	
Mannitol Salt Agar contains Proteose Peptone and Beef Extract as sources of carbon, nitrogen, vitamins and minerals. D-Mannitol is the carbohydrate source. Sodium Chloride, in high concentration, inhibits most bacteria other than staphylococci. Phenol Red is the pH indicator. Agar is the solidifying agent. Bacteria that grow in the presence of a high salt concentration and ferment mannitol produce acid products which turn the phenol red pH indicator from red to yellow. Typical pathogenic staphylococci (coagulase – positive staphylococci) ferment mannitol and form yellow colonies with yellow zones around the colonies. Typical non – pathogenic staphylococci do not ferment mannitol and form red colonies.	

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 aureus (6538)	Luxuriant	Yellow/white colonies surrounded by yellow zone
	Staphylococcus epidermidis (14490)	Fair to good	Red
	Staphylococcus epidermidis (12228)	Fair to good	Red
	Escherichia coli (25922)	Inhibited	---
	Escherichia coli (8739)	Inhibited	---
	Proteus mirabilis (12453)	None-poor	Yellow

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 as per I.P.
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
B612	111g/l	4.05L	7.4 ± 0.2	Nil	121^0C / 15 minutes

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