BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B610	**MANNITOL MOTILITY TEST MEDIUM**

Formula

Ingredients :	**gms/lit.**
Peptic digest of animal tissue	20.00
Mannitol	2.00
Potassium nitrate	1.00
Phenol red	0.04
Agar	3.00

Final pH (at 25°C) : 7.6 ± 0.2

Directions :

Suspend 26.04 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense into test tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool the tubed medium in an upright position.

Principle :

The highly nutritious peptic digest of animal tissue supports luxuriant growth of fastidious bacteria like Staphylococci. Semisolid nature of the medium due to 0.3% agar helps to detect motility. Motile bacteria produce diffused growth throughout the medium while non-motile bacteria grow only along the line of inoculation. Fermentation of mannitol produces acidity in the medium. Phenol red is the pH indicator, which detects acidity by exhibiting a visible colour change from red to yellow.

QC Tests – (I)Dehydrated Medium	
Colour :	Light yellow to pink
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	7.6 ± 0.2
Colour (post autoclaving/heating) :	Red
Clarity (post autoclaving/heating) :	Clear to slightly opalescent semisolid gel
(III) Q.C. Test Microbiological	

Cultural characteristics observed after 18-48 hours at 35-37°C.

MICROORGANISM (ATCC)	GROWTH	MANNITOL FERMENTATION	MOTILITY
Escherichia coli (35218)	Luxuriant	Positive reaction, yellow colour	+
Proteus vulgaris (13315)	Luxuriant	Negative reaction, no colour change	+
Proteus mirabilis (25933)	Luxuriant	Negative reaction, no colour change	+
Salmonella Typhi (6539)	Luxuriant	Positive reaction, yellow colour	+
Shigella sonnei (25931)	Luxuriant	Positive reaction, yellow colour	-
Staphylococcus aureus (25923)	Luxuriant	Positive reaction, yellow colour	-
Staphylococcus epidermidis (12228)	Luxuriant	Negative reaction, no colour change	-

Motility=+ Growth away from stabline causing turbidity
- Growth along the stabline, surrounding medium remains clear

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:	It is a semisolid medium suitable for determining motility and mannitol fermentation.
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
B610	26.04 g/l	19.201 L	7.6 ± 0.2	NIL	121^0C / 15 minutes