

**TECHNICAL SHEET**

PP014	Mannitol Salt Agar Plates				
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:					
Label the ready to use plate (PP014). Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.					
Principle:					
Mannitol Salt Agar contains Proteose Peptone and Meat Extract B 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.					
(I) QC Tests					
pH:		7.4 ± 0.2			
Color:		Red coloured medium.			
Appearance:		Sterile Mannitol SaltAgar in 90X15 mm disposable plates.			
(II)Sterility test		Passes release criteria			
(III)Q.C. Test Microbiological					
Growth promotion was carried out in accordance with the standard method and growth was observed after an incubation at30-35°C for the specified time. Recovery rate is considered 100% for bacteria growth on Soyabean Casein Digest Agar.					
MICROORGANISM (ATCC)		INOCULUM (CFU)	GROWTH	Recovery	COLOR OF COLONY
Staphylococcus aureus 6538		50 -100	luxuriant	≥50 %	yellow/white colonies surrounded by yellow zone
Staphylococcus aureus 25923		50 -100	luxuriant	≥50 %	yellow/white colonies surrounded by yellow zone
Staphylococcus epidermidis 12228		50 -100	fair - good	30 -40 %	Red
Staphylococcus epidermidis14990		50 -100	fair - good	30 -40 %	Red
Proteus mirabilis 12453		≥10 <sup>3</sup>	None-poor	0 -10%	yellow
Escherichia coli 8739		≥10 <sup>3</sup>	inhibited	0 -0 %	-
Escherichia coli 25922		≥10 <sup>3</sup>	inhibited	0 -0 %	-
Escherichia coli 9002		≥10 <sup>3</sup>	inhibited	0 -0 %	-
Enterobacter aerogenes13048		≥10 <sup>3</sup>	inhibited	0 -0 %	-

Precautions :	1. In Vitro diagnostic use only.
	2. Read the label before opening the container
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.
Storage:	Store between 2-8°C. Use before expiry date on the label.
Packing:	10/20/50 disposable plates.

**Disclaimer:**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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