B470	**COAGULASE MANNITOL AGAR BASE**
Formula	
Ingredients :	**gms/lit.**
Brain heart infusion	5.00
Casein enzymic hydrolysate	10.50
Papaic digest of soyabean meal	3.50
Sodium chloride	3.50
Mannitol	10.00
Bromo cresol purple	0.02
Agar	14.50
Final pH (at 25°C) : 7.4 ± 0.2	

Directions :

Suspend 47.02 gms. in 1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 12-15 lbs pressure (118-121°C) for 15 minutes. Cool to 45-50°C.Add 7-15% v/v sterile, pretested, coagulase plasma to the basal medium. Mix well and pour into sterile petri plates.

Principle :

The medium is used for the isolation of Staphylococcus aureus from clinical specimens and for differentiation of Staphylococcus aureus from other species on the basis of coagulase production and mannitol fermentation. Mutant or old cultures of Staphylococcus aureus may be weak coagulase producers. They should be freshly subcultured and reachecked. E.coli ferments mannitol and may be weakly coagulase positive. Coagulase production is dependent on the presence of a fermentable sugar like mannitol in this case. It is also dependent on the presence of a protein factor in the brain heart infusion and blood serum (plasms). When mannitol is fermented, the pH of the medium surrounding the colonies of coagulase positive drops. This drop in pH is indicated by the change in colour of the bromo cresol purple which turns yellow and exhibit yellow zones around the colonies. An opaque area of coagulated plasms forms around the colonies of coagulase positive organisms.

QC Tests – (I)Dehydrated Medium	
Colour :	Light yellow to Light grey
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	7.4 ± 0.2
Colour (post autoclaving/heating) :	Purple
Clarity (post autoclaving/heating) :	Slightly opalescent
(III)Q.C. Test Microbiological	

Cultural characteristics observed with added 7-15% v/v sterile pretested, rabbit plasma at 35-37°C for 18-48 hours.

MICROORGANISM (ATCC)	GROWTH	MANNITOL FERMEN.	COAGULASE PRODUCTION
Staphylococcus aureus (25923)	Luxuriant	+ (Yellow)	+ (Opaque zone)
Staphylococcus epidermidis (12228)	luxuriant	- (Purple)	-

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 primary isolation and differentiation of pathogenic Staphylococci from clinical specimens or for classifying pure cultures.
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
B470	47.02g/l	10.63L	7.4 ± 0.2	7-15% v/v sterile, pretested, coagulase plasma	121^0C / 15 minutes