

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B352	VOGEL JOHNSON AGAR BASE w/o TELLURITE (V.J.AGAR)					
Formula						
Ingredients :		gms/lit.				
Casein enzymic hydrolysate		10.00				
Yeast extract		5.00				
Mannitol		10.00				
Dipotassium phosphate		5.00				
Lithium chloride		5.00				
Glycine		10.00				
Phenol red		0.025				
Agar		16.00				
Final pH (at 25°C) :		7.2 ± 0.2				
Directions :						
Suspend 61.02 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and add 20 ml of sterile 1% Potassium Tellurite solution (BF010). Mix gently and pour into sterile Petri plates.						
Principle :						
Casein enzymic hydrolysate and yeast extract provide nitrogenous compounds, vitamin B complex and other growth nutrients. Dipotassium phosphate provides buffering to the medium. During the first 24 hours of incubation, contaminating organisms are almost inhibited by tellurite, lithium chloride and high glycine content. The effect of inhibitors on <i>S. aureus</i> is reduced because of the presence of mannitol and glycine. Coagulase-positive staphylococci reduce potassium tellurite to metallic free tellurium and thus produce black colonies surrounded by yellow zones. This yellow colour is due to phenol red indicator that turns yellow in acidic condition due to the fermentation of mannitol.						
QC Tests – (I) Dehydrated Medium						
Colour :		Light yellow to pink				
Appearance :		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		7.2 ± 0.2				
Colour (post autoclaving/heating) :		Red				
Clarity (post autoclaving/heating) :		Clear to slightly opalescent				
(III) Q.C. Test Microbiological						
Cultural characteristics observed with added 1% Potassium Tellurite solution (BF010), after an incubation at 35-37°C for 24-48 hours.						
MICROORGANISM (ATCC)		GROWTH	COLOUR OF COLONY			
Staphylococcus aureus (25923)		Luxuriant	Black with yellow halo			
Staphylococcus epidermidis (12228)		Fair to good	Translucent to blackish			
Proteus mirabilis (25933)		Poor	Black			
Escherichia coli (25922)		Inhibited	--			
Staphylococcus aureus (6538)		Luxuriant	Black with yellow halo			
Precautions :		1. For Laboratory Use. 2. Lithium chloride is harmful. Avoid bodily contact and inhalation of vapours. On contact with skin, wash with plenty of water immediately.				
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 coagulase positive, mannitol fermenting Staphylococcus aureus from heavily contaminated foods and clinical specimens.				
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
B352	61.02 gm/l	8.194 L	7.2 ± 0.2	1% Potassium Tellurite (BF010)	121°C/15 min	