

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B181</b>	<b>EDWARDS MEDIUM, MODIFIED</b>					
<b>Formula</b>						
<b>Ingredients :</b>		<b>gms/lit.</b>				
Peptic digest of animal tissue		10.00				
Meat Extract B#		10.00				
Esculin		1.00				
Sodium chloride		5.00				
Thallos sulphate		0.33				
Crystal violet		0.0013				
Agar		15.00				
#- Equivalent to Beef extract						
Final pH (at 25°C) :7.4 ± 0.2						
<b>Directions :</b>						
Suspend 41.33 grams in 1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 10 lbs pressure (115°C) for 20 minutes. Cool to 50°C & aseptically add 5 to 7% v/v sterile bovine or sheep blood. Mix well and pour into sterile petri plates.						
<b>Principle :</b>						
Peptic digest of animal tissue & Meat Extract B provide essential nutrient. This medium is selective due to the presence of crystal violet and thallos sulphate. Streptococci causing mastitis show α, β or γ type haemolysis. Esculin differentiates esculin positive group – D Streptococci from negative Streptococcus agalactiae. Agar acts as a solidifying agent.						
<b>QC Tests – (I) Dehydrated Medium</b>						
Colour :		Cream to yellow				
Appearance :		Homogeneous Free Flowing powder				
<b>(II) Rehydrated medium</b>						
pH (post autoclaving/heating) :		7.4 ± 0.2				
Colour (post autoclaving/heating) :		A) Basal medium : Amber B) (After addition of 5-7% v/v sterile defibrinated bovine or sheep Blood) : Cherry red				
Clarity (post autoclaving/heating) :		A) Clear to slightly opalescent B) Opaque				
<b>(III) Q.C. Test Microbiological</b>						
Cultural characteristics observed with added 5-7%v/v sterile defibrinated sheep blood after an incubation at 35-37°C for 24-48 hours.						
MICROORGANISM (ATCC)		GROWTH		COLOUR OF COLONY		
Streptococcus agalactiae (13813)		Good- luxuriant		Colourless colonies with haemolysis		
Streptococcus faecalis (29212)		Good- luxuriant		Black colonies		
Staphylococcus aureus (25923)		Inhibited		--		
Escherichia coli (25922)		Inhibited		--		
<b>Precautions :</b>		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. 3. POISON. : Thallium salts are very toxic by inhalation or by ingestion and there is a danger of cumulative effects. Products containing thallium salts must be kept away from food, drink and animal feeding stuffs. Always wear a mask and gloves when handling the powder.				
<b>Limitations :</b>		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
<b>Use :</b>		For selective and rapid isolation of Streptococcus agalactiae and other Streptococci associated with bovine mastitis.				
<b>Storage :</b>		Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.				
<b>Packing :</b>		500 gm. bottle				
<b>Product profile:</b>		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B181</b>	41.33g/l	12.09L	7.4 ± 0.2	5 to 7% v/v sterile bovine or sheep blood	115°C / 20 minutes	

**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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