

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B184</b>	<b>SPS AGAR</b>					
<b>Formula</b>						
<b>Ingredients :</b>		<b>gms/lit.</b>				
Casein enzymic hydrolysate		15.00				
Yeast extract		10.00				
Sodium sulphite		0.50				
Polymixin B sulphate		0.01				
Sulphadiazine		0.12				
Ferric citrate		0.50				
Agar		13.90				
Final pH (at 25°C) :		7.0 ± 0.2				
<b>Directions :</b>						
Suspend 40.03 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. Mix well and pour into sterile Petri plates.						
<b>Principle :</b>						
SPS Agar contains Casein enzymic hydrolysate as a source of carbon, nitrogen, vitamins and minerals. Yeast Extract supplies B-complex vitamins which stimulate bacterial growth. Ferric Citrate and Sodium Sulfite are H <sub>2</sub> S indicators. Clostridia reduce the sulfite to sulfide which reacts with the iron from ferric citrate to form a black iron sulfide precipitate. Polymyxin B Sulfate and Sulphadiazine are inhibitors to organisms other than Clostridium spp. Agar is solidifying agent.						
<b>QC Tests - (I) Dehydrated Medium</b>						
Colour :		Medium amber to yellow				
Appearance :		Homogeneous Free Flowing powder				
<b>(II) Rehydrated medium</b>						
pH (post autoclaving/heating) :		7.0 ± 0.2				
Colour (post autoclaving/heating) :		Medium amber				
Clarity (post autoclaving/heating) :		Slightly opalescent				
<b>(III) Q.C. Test Microbiological</b>						
Cultural characteristics observed after 18 – 48 hrs. at 35-37°C incubated anaerobically.						
MICROORGANISM (ATCC)		GROWTH	COLOUR OF COLONY			
Clostridium perfringens (12924)		Good -Luxuriant	Black			
Clostridium sporogenes (11437)		Poor to good	Black			
Staphylococcus aureus (25923)		None to poor	White			
Escherichia coli (25922)		Inhibited	-			
<b>Precautions :</b>		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<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. 2. The high degree of selectivity of SPS Agar may inhibit some strains of C. perfringens while other strains that grow may fail to produce distinguishing black colonies.				
<b>Use :</b>		For detection of Clostridium perfringens in foods.				
<b>Storage :</b>		Dehydrated medium and 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>B184</b>		40.03g/l	12.49 L	7.0 ± 0.2	NIL	121°C / 15 minutes