

<b>B734</b>	<b>STREPTOCOCCUS AGALACTIAE SELECTIVE AGAR BASE</b>			
<b>Formula</b>				
<b>Ingredients :</b>		<b>gms/lit.</b>		
Peptic digest of animal tissue		10.00		
Meat extract		5.00		
Sodium chloride		5.00		
Esculin		1.00		
Thallos sulphate		0.333		
Crystal violet		0.0013		
Agar		13.00		
Final pH (at 25°C) : 7.4 ± 0.2				
<b>Directions :</b>				
Suspend 34.34 grams in 940 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C and add 60 ml defibrinated blood and 25ml Staphylococcus β-toxin. Mix well and pour into sterile Petri plates.				
<b>Principle :</b>				
Streptococcus agalactiae is a gram-positive Streptococcus characterized by the presence of group B Lancefield antigen. S.agalactiae exhibits beta haemolytic reaction. On blood agar plate, it forms zones of haemolysis that are slightly bigger than the size of colonies formed. Group B streptococci hydrolyze sodium hippurate and give a positive response in the CAMP test. S.agalactiae is also sensitive to bile and will lyse in its presence. Streptococcus Agalactiae Selective Agar was formulated by Hauge and Kohler-Ellingsen for the isolation of S.agalactiae, the causative agent of mastitis in cattle. Differentiation between Streptococcus species is done on the basis of esculin hydrolysis seen as dark brown colour due to formation of an esculin-thallium complex. Thallos sulphate and crystal violet inhibit the accompanying bacterial flora. Staphylococcus β-toxin attacks the erythrocytes present in the medium in such a way that they may be completely haemolyzed. S. agalactiae is not haemolytic on simple blood agar. Thus S. agalactiae can be distinguished from obligate, non-haemolyzing colonies. S.agalactiae forms dove-blue coloured smooth colonies surrounded by zones of haemolysis. Further identification is done by using biochemical and serological methods, but primarily by using CAMP test.				
<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 : Light purple b) With addition of blood : Reddish purple		
Clarity (post autoclaving/heating) :		a) Clear to slightly opalescent b) Opalescent		
<b>(III) Q.C. Test Microbiological</b>				
Cultural characteristics observed after 24 - 48 hours at 35-37°C.				
MICROORGANISM (ATCC )	GROWTH	BLUE COLONY	HAEMOLYSIS	
Streptococcus agalactiae (13813)	Luxuriant	+	Beta	
Streptococcus agalactiae (27956)	Luxuriant	+	Beta	
Streptococcus cremoris (19257)	Luxuriant	±	Alpha	
Enterococcus faecalis (29212)	Luxuriant	±	Alpha	
Streptococcus pneumoniae (6301)	Luxuriant	-	Alpha	
Streptococcus pyogenes (19615)	Luxuriant	-	Beta	
Streptococcus lactis (19435)	Inhibited	-	-	
Staphylococcus aureus (25923)	Inhibited	-	-	
Escherichia coli (25922)	Inhibited	-	-	
Pseudomonas aeruginosa (27853)	Inhibited	-	-	
Key : ± = variable				

**TECHNICAL SHEET**

<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.				
<b>Use :</b>	For selective isolation of streptococcus agalactiae from dairy products.				
<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>B734</b>	34.34g/l	14.560L	7.4 ± 0.2	Defibrinated blood and 25 ml. Staphylococcus β toxin	DO NOT AUTOCLAVE.