

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B1479	BILE ESCULIN AGAR					
Formula						
Ingredients:		gms/lit.				
Peptic digest of animal tissue		5.00				
Beef extract		3.00				
Bile salts		40.00				
Esculin		1.00				
Ferric citrate		0.50				
Agar		15.00				
Final pH (at 25°C): 6.6 ± 0.2						
Directions:						
Suspend 64.5 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense into tubes or flasks. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubed medium to solidify in a slanted position with a butt of 2.5 cm deep or pour into sterile Petri plates.						
Principle:						
Peptic digest of animal tissue and beef extract serve as source of carbon, nitrogen and essential growth factors. Bile salts inhibit the accompanying gram-positive bacteria. Organisms hydrolyze esculin to esculetin and dextrose. Esculetin further reacts with ferric citrate to form a dark brown or black complex. Esculin hydrolyzers hydrolyze the glycoside esculin to esculetin and dextrose.						
QC Tests - (I) Dehydrated Medium						
Colour :		Light yellow to brownish yellow				
Appearance:		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.6 ± 0.2				
Colour (post autoclaving/heating):		Yellow to amber				
Clarity (post autoclaving/heating):		Clear to Slightly opalescent				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 18 -24 hrs at 35-37°C.						
MICROORGANISM (ATCC)		GROWTH		ESCULIN HYDROLYSIS		
Enterococcus faecalis (29212)		Good-Luxuriant		Positive reaction, blackening of medium		
Streptococcus faecium (8482)		Good-Luxuriant		Positive reaction, blackening of medium		
Yersinia enterocolitica (27729)		Good-Luxuriant		Positive reaction, blackening of medium		
Escherichia coli (25922)		Good		Negative reaction		
Precautions :		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. 3. IRRITANT. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed. Target organ(s) : Lungs.				
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 the isolation and identification of Yersinia enterocolitica from food and animal feeding stuffs. The composition and performance criteria of this medium are as per the specifications laid down in ISO 10273:1994.				
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
B1479	64.5 g/l	7.751 L	6.6 + 0.2	NIL	Do not autoclave	