

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B127	BUFFERED CHARCOAL YEAST EXTRACT AGAR BASE					
Formula						
Ingredients:		gms/lit.				
Yeast extract		10.00				
Charcoal activated		2.00				
ACES buffer		10.00				
α -Ketoglutarate monopotassium salt		1.00				
Agar		17.00				
Final pH (at 25°C): 6.9 ± 0.2						
Directions:						
Suspend 20 grams in 500 ml distilled water. Add 2.4 grams KOH pellets and mix to dissolve. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C. Aseptically add sterile rehydrated contents of 1 vial each of Legionella Supplement (BF025 and BF026). Mix well and pour with constant stirring to ensure that charcoal particles get evenly distributed. For additional selectivity, Legionella Selective Supplements (BF022, BF024) may be added to molten medium as per choice.						
Principle:						
This medium is used for selective cultivation of Legionella species that require special media to optimize the growth. They do not oxidize or ferment carbohydrates in conventional media or grow on sheep blood agar. Amino acids are their major sources of energy and all but one species has a absolute requirements for L-cystine. This amino acid as well as ferric pyrophosphate helps for the growth of Legionella. It contains charcoal which is a deoxidant. Yeast extract which act as rich source of vitamins, nitrogen as well as carbon. ACES Buffer maintains optimal pH for growth while L-cysteine hydrochloride, ferric pyrophosphate and α -Ketoglutarate stimulate growth of Legionella species. For selective isolation, antibiotic supplements can be used to suppress contaminating microorganisms.						
QC Tests - (I) Dehydrated Medium						
Colour:		Gray to black				
Appearance:		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.9 ± 0.2				
Colour (post autoclaving/heating):		Grey - black				
Clarity (post autoclaving/heating):		Opalescent				
(III) Q.C. Test Microbiological						
Cultural characteristics observed in 90% humid atmosphere with added Legionella Supplement (BF025 and BF026), after an incubation at 35-37°C for 3-4 days.						
MICROORGANISM (ATCC)		GROWTH		COLOUR OF COLONY		
Legionella pneumophila (33153)		Luxuriant		White grey to blue - grey		
Legionella dumoffii (33343)		Luxuriant		Light blue - grey		
Escherichia coli (25922)		None to poor		-		
Staphylococcus epidermidis (12228)		None to poor		-		
Precautions :		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
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 and cultivation of Legionella species from clinical and other samples.				
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
B127	40g/l	12.5L	6.9 ± 0.2	Legionella Supplement(BF025 and BF026)	121°C / 15 minutes	