BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B762	SULPHATE REDUCING MEDIUM (Triple Pack)					
Formula		, ,				
Ingredients:		gms/lit.				
Part A:						
Peptic digest of animal tissue		2.00				
Meat Extract B#		1.00				
Magnesium sulphate, heptahydrate		2.00				
Sodium sulphate		1.50				
Dipotassium phosphate		0.50				
Calcium chloride		0.10				
#- Equivalent to Beef extract						
Part B :						
Ferric ammonium sulphate, hexahydrate		0.392				
Sodium ascorbate		0.10				
Part C :						
Sodium lactate		3.50				
Final pH (at 25°0	C): 7.5 <u>+</u> 0.3					
Directions :						
C		i debudueted medie men litural of Deut A in OOO mel distilled western				

Suspend 6.08 grams (equivalent weight of dehydrated media per litre) of Part A in 900 ml distilled water. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. On the day of use prepare solution of Part B by suspending 0.384 grams (equivalent weight of dehydrated media per litre) of Part B in 100 ml distilled water. Sterilize by filtration through a 0.45 μ m membrane filter and aseptically add this 100 ml solution to 900 ml Part A medium. Then separately sterilize the 3.50 grams Part C by autoclaving at 15 lbs pressure (121°C) for 15 minutes and aseptically add to the mixture of Part A and B. Mix well and aseptically transfer the complete medium to sterile screw capped tubes filling them completely.

Principle:

Sulphate reducing bacteria such as Desulfovibrio converts sulphate to sulphide which reacts with ferrous ions to give a black colour within 4 to 21 days at 20-30°C. Thiobacillus also produces sulphuric acid and hence is found in environment containing H2S. Peptone and meat extract B in the medium provide nitrogen and other nutrients necessary to support bacterial growth. Potassium phosphates buffer the medium. Sodium chloride and the sulphate salts provide essential ions. The tubes are filled completely to create anaerobic conditions. When sample volume is greater than 10 ml, sample is passed through a 0.45 um membrane filter and the filter is transferred to screw-capped test tubes containing medium.

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Q	Tests - (I)De	hydrated Medium								
	Colour:	Part A: C	Part A: Cream to Yellow Part B: white to cream Part C: Colourless							
		solution	solution							
	Appearance:	Part A &	Part A & B: Homogeneous Free Flowing powder							
(II)Rehydrated medium										
	pH (post autoc	7.5 ± 0.2	7.5 ± 0.2							
	Colour (post a	: Light yello	Light yellow							
	Clarity (post autoclaving/heating):			Clear to slightly opalescent						
(III)Q.C. Test Microbiological										
	Cultural characteristics observed after 4-21 days at 20 - 30°C.									
	MICROORGANI		GROWTH							
	Desulfovibrio desulfuricans (13541)			Luxuriant						
	Thiobacillus thiooxidans (19377)			Good - luxuriant						
Precautions: 1. For Laboratory Use.			se.							
2. Follo		2. Follow proper, es	ow proper, established laboratory procedures in handling and disposing of infectious							
		materials.								
Li	mitations :	1. Since the nutritio	nal requirem	nents of	organisms vary	, some strains	may be encountered			
		that fail to grow or o	row poorly	on this n	nedium.					
Us	For enumeration of sulphate reducing bacteria in water samples.									
St	orage: Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.									
Pa	acking :	king: 500 gm. bottle								
Pr	roduct Reconstitution Quantity		Quantity on		pH (25°C)	Supplement	Sterilization			
	ofile:		Preparation	(500g)						
	762	6.08+0.49+3.5g/l	45.08	5L	7.5 ± 0.3	NIL	121°C / 15 minutes			
Dofo	r disclaimer Overl	oof								

Refer disclaimer Overleaf

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Disclaimer:

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