

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B326	SULPHATE API AGAR					
Formula						
Ingredients :		gms/lit.				
Yeast extract		1.00				
Ascorbic acid		0.10				
Magnesium sulphate		0.20				
Dipotassium phosphate		0.01				
Ferrous ammonium sulphate		0.10				
Sodium chloride		10.00				
Agar		14.00				
Final pH (at 25°C) : 7.4 ± 0.2						
Directions :						
Suspend 25.41 grams in 1000 ml distilled water. Add 4 ml of sodium lactate. Heat to boiling to dissolve the medium completely. Dispense preferably in screw-capped tubes in 9 ml amounts. Sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes. Close the caps immediately while the medium is still hot.						
Principle :						
Sulphate-reducing bacteria convert sulphate to sulphite , which with the ferrous ion gives black colour.The insoluble sulphide results in plugging.Sulphate API media are prepared according to the formulation describe in the American Petroleum Institute Recommended Practice for detection of sulphate-reducing bacteria. Yeast extract in the medium provides nitrogen and other nutrients necessary to support bacterial growth.Ascrobic acid is the carbohydrate source.Potassium phosphate buffer the medium.Sodium chloride, magnesium sulphate and ferrous ammonium sulphate provide essential ions. Desulfovibrio oxidizes reduced substrates i.e. sodium lactate,further with stepwise reduction of sulphate to sulfide .The detection and estimation of these bacteria is done on the basis of their ability to grow and produce sulphide in this medium.For the estimation, appropriate dilutions of water samples are inoculated.						
QC Tests – (I)Dehydrated Medium						
Colour :		Cream to yellow				
Appearance :		Homogeneous Free Flowing powder				
(II)Rehydrated medium						
pH (post autoclaving/heating) :		7.4 ± 0.2				
Colour (post autoclaving/heating) :		Light yellow				
Clarity (post autoclaving/heating) :		Clear to slight opalescent.				
(III)Q.C. Test Microbiological						
Cultural characteristics observed after an incubation at 30°C for upto 1 week, under anaerobic condition.						
MICROORGANISM (ATCC)		GROWTH				
Desulfovibrio desulfuricans (13541)		Good-Luxuriant				
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 detection and estimation of sulphate reducing bacteria.				
Storage:		Dehydrated and Prepared medium– Between 2 to 8°C.				
Packing :		500 gm. bottle				
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B326		25.41g/l	19.677L	7.4 ± 0.2	NIL	121°C / 10 minutes

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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