

TECHNICAL SHEET

B756		SULPHATE API BROTH				
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			
Final pH (at 25°C) :			7.5 ± 0.2			
Directions :						
Suspend 11.4 gms in 1000ml. distilled water. Add 4 ml. of sodium lactate. Heat 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.						
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 :		Yellow			
	Appearance :		Homogeneous Free Flowing powder			
(II)Rehydrated medium						
	pH (post autoclaving/heating) :		7.5 ± 0.2			
	Colour (post autoclaving/heating) :		Light yellow			
	Clarity (post autoclaving/heating) :		Clear to slightly opalescent			
(III)Q.C. Test Microbiological						
	Cultural characteristics observed after upto 1 week at 28-30°C, when incubated anaerobically.					
	MICROORGANISM (ATCC)		GROWTH			
	Desulfovibrio desulfuricans (13541)		Good to 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 of sulphate reducing bacteria.				
Storage :		Dehydrated medium and prepared medium– Between 2 to 8°C.				
Packing :		500 gm. bottle				
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B756		11.4g/l	43.859L	7.5 ± 0.2	NIL	121°C / 10 minutes