BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B137	**SULPHUR MEDIUM (Twin Pack)**
Formula	
Ingredients :	**gms/lit.**
Part A :	
Potassium dihydrogen phosphate	3.00
Magnesium sulphate	0.50
Ammonium sulphate	0.30
Calcium chloride	0.25
Ferric chloride	0.02
Part B :	
sulphur, elemental	10.00

Final pH (at 25°C) : 4.8 ± 0.2

Directions :

Suspend 3.74 gms.of Part A in 1000ml. distilled water. Dissolve and dispense in 100 ml. amounts in 250 ml. conical flasks. Add 1 gm. OfPart Beach 100 ml. medium. Sterilize with intermittent steam for 30 minutes on 3 consecutive days.

Principle :

Sulphur medium is prepared as per the recommendation of APHA for cultivation T.thiooxidans. This organisms was first discovered by Waksman and Joffe in soils containing free sulphur and rock phosphate T. thiooxidans derives its energy by the sulphur oxidation and survives at very acidic pH levels.Elemental sulphur in the medium serves as the energy source for the organism. Ammonium sulphate serves as the nitrogen source while calcium, ferric chloride and magnesium sulphate supply inorganic ions. Potassium dihydrogen phosphate buffers the medium against pH changes.

QC Tests – (I)Dehydrated Medium	
Colour :	Part A : White to cream Part B : Yellow to greenish yellow
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	4.8 ± 0.2
Colour (post autoclaving/heating) :	Colourless
Clarity (post autoclaving/heating) :	Clearsolution with sulphur sediment.
(III)Q.C. Test Microbiological	

Cultural characteristics observed after 4 – 5 days at 25 – 30°C.

MICROORGANISM (ATCC)	GROWTH
Thiobacillus thiooxidans (19377)	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 cultivation of Thiobacillus thiooxidans.
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
B137	3.74+10g/l	36.39L	4.8 ± 0.2	NIL	121^0C / 15 minutes