

**BIOMARK Laboratories-INDIA**  
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**TECHNICAL SHEET**

<b>B137</b>	<b>SULPHUR MEDIUM (Twin Pack)</b>					
<b>Formula</b>						
<b>Ingredients :</b>		<b>gms/lit.</b>				
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						
<b>Directions :</b>						
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.						
<b>Principle :</b>						
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.						
<b>QC Tests - (I)Dehydrated Medium</b>						
Colour :		Part A : White to cream Part B : Yellow to greenish yellow				
Appearance :		Homogeneous Free Flowing powder				
<b>(II)Rehydrated medium</b>						
pH (post autoclaving/heating) :		4.8 ± 0.2				
Colour (post autoclaving/heating) :		Colourless				
Clarity (post autoclaving/heating) :		Clearsolution with sulphur sediment.				
<b>(III)Q.C. Test Microbiological</b>						
Cultural characteristics observed after 4 - 5 days at 25 - 30°C.						
MICROORGANISM (ATCC )		GROWTH				
Thiobacillus thiooxidans (19377)		Luxuriant				
<b>Precautions :</b>		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<b>Limitations :</b>		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
<b>Use :</b>		For cultivation of Thiobacillus thiooxidans.				
<b>Storage :</b>		Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
<b>Packing :</b>		500 gm. bottle				
<b>Product profile:</b>		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B137</b>		3.74+10g/l	36.39L	4.8 ± 0.2	NIL	121°C / 15 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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