TECHNICAL SHEET

B958	**IRON OXIDIZING MEDIUM (Twin Pack)**

Formula

Ingredients :	**gms/lit.**
Part A :	
Ammonium sulphate	3.00
Potassium chloride	0.10
Dipotassium phosphate	0.50
Magnesium sulphate	0.50
Calcium nitrate	0.01
Part B :	
Ferrous sulphate	44.22

Final pH (at 25°C) : 3.0 ± 0.2

Directions :

Suspend 4.11 gms in 700 ml distilled water containing 1 ml of 10 N sulphuric acid. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool and mix with separately sterilized 300 ml of Part B.

Principle :

Thiobacillusferrooxidans utilizes ferrous sulphate as an energy source and can be enumerated by MPN technique. Growth of the organism is manifested by a decrease in pH and an increase in concentration of oxidized iron. The organism is strictly aerobic, so the tubes should be shaken every day during incubation for aeration.

QC Tests – (I)Dehydrated Medium	
Colour :	Part A : white Part B : Greenish
Appearance :	Part A :Homogeneous Free Flowing powder Part B : Hygroscopic powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	3.0 ± 0.2
Colour (post autoclaving/heating) :	Green
Clarity (post autoclaving/heating) :	Clear
(III)Q.C. Test Microbiological	

Cultural characteristics observed after upto 5 days at 30°C.

MICROORGANISM (ATCC)	GROWTH	
Thiobacillus ferrooxidans (23270)	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 the isolation, cultivation and enrichment of Thiobacillus ferroxidans.
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
B958	4.11 g/l Part A 44.22 g/l Part B	10.34 L	3.0± 0.2	Nil	121^{0}C/15 min.

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