

TECHNICAL SHEET

B1808	Modified Iron Sulphite agar Base (ISA)ISO		
Formula			
Ingredients :	gms/lit.		
Casein enzymic hydrolysate	15.000		
Sodium sulphite	0.500		
Yeast extract	10.000		
Agar	15.00		
Final pH (at 25°C) : 6.9 ± 0.2			
Directions :			
Suspend 20.25 grams in 500 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add rehydrated contents of 1 vial of Iron Sulphate Supplement (BF170).			
Principle :			
The medium contains casein enzymic hydrolysate and yeast extract, which act as sources of nitrogen, carbon, vitamins and minerals. Reduction of sulphite and precipitation of the resultant sulphide as a black deposit involves an appropriate iron salt that yields iron sulphide. The reaction is seen as a black halo around each colony. Inclusion of a fermentable carbohydrate in the medium can lead to a rapid fall in pH during bacterial growth and failure to precipitate the sulphide. Clostridia grow to form black colonies in an anaerobic environment.			
QC Tests – (I)Dehydrated Medium			
	Colour :	Cream to yellow	
	Appearance :	Homogeneous Free Flowing powder	
(II)Rehydrated medium			
	pH (post autoclaving/heating) :	6.9 ± 0.2	
	Colour (post autoclaving/heating) :	Yellow to amber	
	Clarity (post autoclaving/heating) :	clear to slightly opalescent gel forms in Petri plates	
(III)Q.C. Test Microbiological			
	Cultural characteristics observed with added Iron Sulphate Supplement (BF170) after an incubation at 35-37°C for 24-48 hours		
	MICROORGANISM (ATCC)	GROWTH	BLACKENING
	Clostridium perfringens ATCC 10543	Good	Positive
	Clostridium perfringens ATCC 13124	Good	Positive
	Clostridium botulinum	Good	Positive
	Escherichia coli ATCC 25922	Fair	Negative
	Pseudomonas aeruginosa ATCC 27853	Poor	Negative
	Bacillus cereus ATCC 11778	Poor	Negative
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 :	Modified Iron Sulphite Agar Base is recommended for the detection and enumeration of clostridia in meat and meat products.		
Storage :	Dehydrated medium- below 30 ° C Prepared mediums– Between 2 to 8°C.		
Packing :	500 gm. bottle		

BIOMARK Laboratories-INDIAwww.biomarklabs.com**TECHNICAL SHEET**

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1808	40.5 g/l	12.345/L	6.9 ± 0.2	Iron Sulphate Supplement (BF170)	121 ⁰ C/15 min.

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. The information contained in this publication is based on our in-house studies and market performance and is to the best of our knowledge true and accurate. BIOMARK LABORATORIES reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.