

BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B208	IRON SULPHITE AGAR				
Formula					
Ingredients :		gms/lit.			
Casein enzymic hydrolysate		10.00			
Sodium sulphite		0.50			
Iron (III) citrate		0.50			
Agar		15.00			
Final pH (at 25°C) : 7.1 ± 0.2					
Directions :					
Suspend 26 gms. in 1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.					
Principle :					
Iron sulphite Agar is a modification of Cameron Sulphite Agar developed by the National Canners Association of America. It was shown by Beerens that 0.1% sulphite concentration in the original formula was inhibitory to some strains of Clostridium sporogenes. This observation was later on confirmed by Mossel et al, who consequently showed that 0.05% sulphite concentration was not inhibitory to the organisms. Casein enzymic hydrolysate provides nitrogen and other nutrients necessary to support bacterial growth. Sulphite-reducing bacteria usually produce black colonies as a result of the reduction of sulphite to sulphide, which reacts with the iron (III) salt.					
QC Tests – (I) Dehydrated Medium					
Colour :		Light yellow to brownish yellow			
Appearance :		Homogeneous Free Flowing powder			
(II) Rehydrated medium					
pH (post autoclaving/heating) :		7.1 ± 0.2			
Colour (post autoclaving/heating) :		Light to medium yellow			
Clarity (post autoclaving/heating) :		Slightly opalescent			
(III) Q.C. Test Microbiological					
Cultural characteristics observed after 24- 48 hrs at 55-56°C under anaerobic conditions.					
MICROORGANISM (ATCC)		GROWTH	COLOUR OF COLONIES		
Clostridium sporogenes (19404)		Luxuriant	Black		
Clostridium botulinum (25763)		Luxuriant	Black		
Clostridium butyricum (13732)		Luxuriant	Black		
Desulfotomaculum nigrificans (19853)		Luxuriant	Black		
Escherichia coli (25922)		Good	No blackening		
Precautions :	<ol style="list-style-type: none"> For Laboratory Use. 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 detection of thermophilic anaerobic organisms causing sulphite spoilage in food.				
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
B208	26.0 g/l	19.23 L	7.1 ± 0.2	Nil	121°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.

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