BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B1809	Thiosulfate citrate bile and sucrose agar (TCBS)						
Formula							
Ingredients:	gms/lit.	gms/lit.					
ISO 21872-1:2017(E), FDA BAM, IS:5887(Part V)		B1809- TCBS Agar					
Ingredients	g/L	Ingredients	g/L				
Yeast extract	5.000	Yeast extract	5.00				
Peptone	10.000	Proteose peptone	10.00				
Sodium citrate	10.000	Sodium citrate	10.00				
Sodium thiosulphate	10.000	Sodium thiosulphate	10.00				
Dried bovine bile	8.000	Bile	8.00				
Sucrose	20.000	Sucrose	20.00				
Sodium chloride	10.000	Sodium chloride	10.00				
Iron III citrate	1.000	Ferric citrate	1.00				
Bromo thymol blue	0.040	Bromo thymol blue	0.040				
Thymol blue	0.040	Thymol blue	0.040				
Agar-agar	8.0-18.0	Agar	15.00				
Final pH(at 25°C)	8.6 ± 0.2	Final pH(at 25°C)	8.6 ± 0.2				

Directions:

Suspend 89.08 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle:

Proteose peptone and yeast extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Bile, a derivative of bile salts and sodium citrate inhibit gram-positive bacteria and coliforms. Sodium thiosulphate serves as a good source of sulphur, which in combination with ferric citrate detects the production of hydrogen sulphide. For the metabolism of Vibrios, sucrose is added as a fermentable carbohydrate. Vibrio that is able to utilize sucrose will from yellow colonies. Bromothymol blue and thymol blue are the pH indicators.

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QC Tests – (I)D	ehydrated Medium					
	Colour:	Light yellow to light tan				
Appearance:		Homogeneous Free Flowing powder				
(II)Rehydrated	medium					
pH (post autoclaving/heating):		8.6 ± 0.2				
	Colour (post autoclaving/heating):	Bluish green				
	Clarity (post autoclaving/heating):		Clear to slightly opalescent			
(III)Q.C. Test Microbiological						
	Cultural characteristics observed after 18 –	4 hrs. at 35-37°C.				
	MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONIES			
	Vibrio parahaemolyticus NCTC 10885	Good – luxuriant	green colonies			
	Vibrio furnissii NCTC 11218	Good – luxuriant	green colonies			
	Escherichia coli (25922)	Inhibited				
	Escherichia coli ATCC 8739	Inhibited				
Precautions:	1. For Laboratory Use.					
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.					
	3. IRRITANT. Irritating to eyes, respiratory system and skin. Avoid contact with skin and eyes. Do not breathe dust.					
	Wear suitable protective clothing. Keep container tightly closed.					

Refer disclaimer Overleaf

Page 01 of 02

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inhibited on the medium due to fermentation of sucrose and accumulation of acids. 2. However, occasional isolates of Pseudomonas and Aeromonas may also form blue green colonies at TCBS Agar. 3. Proteus species that are sucrose-fermenters may form yellow colonies 4. TCBS Agar is not a suitable medium for oxidase testing of Vibrio species 5. TCBS Agar is highly selective for Vibrio species. Any H2S negative colony of TCBS Agar can considered presumptive positive for Vibrio 6. A few strains of V. cholerae may appear green or colourless on TCBS due to delayed sucroffermentation 7. Further biochemical and serological tests must be carried out for complete identification.									
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	•				11				
	B1809	89.08 g/l		8.6 ± 0.2	NIL	DO NOT AUTOCLAVE			

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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Page 02 of 02

REV: JANUARY 2025