## **BIOMARK Laboratories-INDIA**

## www.biomarklabs.com

## **TECHNICAL SHEET**

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B489 D	EOXYCHOLATE CITRATE	AGAR w/o SUCROSE				
Formula						
Ingredients:	gms/lit.					
Meat extract	3.00					
Biopeptone	7.00					
Lactose	5.00					
Sodium citrate	10.50					
Sodium deoxycholat	e 2.50					
Sodium thiosulphate	5.00					
Neutral red	0.03					
Agar	12.00					
Final pH (at 25°C):	7.5 <u>+</u> 0.2					

#### **Directions:**

Suspend 45 gms. in 1000 ml. of distilled water. Boil to dissolve the medium completely. DO NOT AUTOCLAVE. Avoid excessive heating as it is detrimental to the medium.

# Principle:

Meat extarct is a source of carbon and nitrogen. Deoxycholate Citrate Agar contains Biopeptone as a source of carbon, nitrogen, vitamins and minerals. Lactose is a carbohydrate. Sodium citrate and Sodium deoxycholate inhibit gram positive bacteria, coliforms and Proteus species. Sodium thiosulphate aids in the detection of H<sub>2</sub>S producing bacteria. Neutral Red is a pH indicator. Agar is a solidifying agent.

In the presence of neutral red, bacteria that ferment lactose produce acid and form red colonies. Bacteria that do not ferment lactose form colorless colonies. If the bacteria produce  $H_2S$ , the colonies will have black centers. The majority of normal intestinal bacteria ferment lactose and do not produce  $H_2S$  (pinkred colonies without black centers). Salmonella and Shigella sp. Do not ferment lactose but Salmonella may produce  $H_2S$  (colourless colonies with or without black centers). Lactose – fermenting colonies may have a zone of precipitation around them caused by the precipitation of deoxycholate in the presence of acid.

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QC Tests - (I)Deh	ydrated Medium									
		Light pink								
Appearance :		Homogeneous Free Flowing powder								
(II)Rehydrated medium										
· · · · · · · · · · · · · · · · · · ·		7.5 ± 0.2								
		Reddish orange								
Clarity (post autoclaving/heating):		Clear to very slightly opalescent								
(III)Q.C. Test Mi										
Cultural characteristics observed after 1										
	MICROORGANISM (ATCC )			COLOUR (	OF COLONY	H <sub>2</sub>	S			
Salmonella enteritidis (13076)		Luxuriant	Colourless	less		-				
Salmonella typhimurium (14028)		Luxuriant	Colourless	ırless		-				
Shigella flexne	Shigella flexneri (12022)		Good	Colourless	5	_				
Escherichia col	Escherichia coli (25922)		Poor	Pink w/bil	nk w/bile ppt.		_			
	faecalis (29212)		Inhibited	_	-					
Precautions:	Precautions: 1. For Laboratory Use.									
	2. Follow prop	oer, esta	blished 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.										
	2. Coliform starains may be encountered that will grow on this medium, making									
	difficult to detect pathogens.									
	3. Heavy inoula should be distributed over the entire surface of the medium prev									
	complete masking of pathogens by coliform organisms.									
Use :	For differentiation and identification of member of Enterobacteriacae.									
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.									
Packing:	500 gm bottle									
Product profile:	Reconstitution			pH (25°C)	Suppleme	ent	St	terilization		
			ion (500g)							
B489	45g/l	1	1.11L	7.5 <u>+</u> 0.2	NIL		DO NO	T AUTOCLAV		

## 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

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