

TECHNICAL SHEET

B491	DEOXYCHOLATE MANNITOL AGAR (GILLIES AGAR NO.1)		
Formula			
Ingredients :		gms/lit.	
Proteose peptone		15.00	
Meat extract B#		2.00	
Yeast extract		2.00	
Dextrose		1.00	
Mannitol		10.00	
Bromothymol blue		0.025	
Cresol red		0.008	
Thymol blue		0.02	
Agar		16.00	
Final pH (at 25°C): 7.2 ± 0.2			
# Equivalent to Beef extract			
Directions :			
Suspend 46.05 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 115°C(10 lbs pressure) for 15 minutes. Cool to 45°C and aseptically add 25 ml of sterile 40% urea solution (BF048). Mix well and dispense in tubes. Cool in a slanted position to form slants with generous butts.			
Principle :			
Beef extract, proteose peptone and yeast extract serve as sources of essential nutrients for bacterial growth. Yeast extract additionally serves as a source of B complex vitamins. Dextrose and mannitol are the fermentable carbohydrates, with bromothymol blue, cresol red and thymol blue forming the indicator mixture. Fermentation of dextrose is indicated by the butt changing colour from deep green to yellow and that of mannitol by the development of a yellow slant. Urease production produces a deep blue colour throughout the medium			
QC Tests – (I)Dehydrated Medium			
Colour :		Light yellow to greenish yellow	
Appearance :		Homogeneous Free Flowing powder	
(II)Rehydrated medium			
pH (post autoclaving/heating) :		7.2 ± 0.2	
Colour (post autoclaving/heating) :		Green	
Clarity (post autoclaving/heating) :		Clear to slightly opalescent	
(III)Q.C. Test Microbiological			
Cultural characteristics observed after 18 -24 hrs.at 35-37°C.			
MICROORGANISM (ATCC)	GROWTH	DEXTROSE/MANNITOL	UREA
Enterobacter aerogenes(13048)	luxuriant	positive reaction,yellow butt/slant	negative reaction
Escherichia coli(25922)	luxuriant	positive reaction,yellow butt/slant	negative reaction
Klebsiella pneumoniae (13883)	luxuriant	positive reaction,yellow butt/slant	positive reaction, deep blue colour
Salmonella Typhi (6539)	luxuriant	positive reaction,yellowbutt/slant	negative reaction
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 :	It is recommended for detection of urease production, dextrose and mannitol fermentation for primary isolation of Salmonella and Shigella species		
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.		
Packing :	500 gm bottle		

Refer disclaimer Overleaf

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Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B491	46.05 g/l	10.85 L	7.2 ± 0.2	40%urea	121°C / 15 minutes

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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