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TECHNICAL SHEET

B1288 XLD AGAR MODII	FIED	
Formula		
Ingredients:	gms/lit.	
Yeast extract	3.00	
L-Lysine hydrochloride	5.00	ļ
Lactose	7.50	ļ
Sucrose	7.50	ļ
Xylose	3.75	
Sodium chloride	5.00	ļ
Sodium deoxycholate	1.00	ļ
Sodium thiosulphate	6.80	ļ
Ferric ammonium citrate	0.80	ļ
Phenol red	0.08	ļ
Agar	15.00	
Final pH (at 25°C): 7.4 ± 0.2		

Directions:

Suspend 55.43 gms. in 1000 ml. distilled water. Heat with frequent agitation until the medium Boils. DO NOT AUTOCLAVE OR OVERHEAT. Transfer immediately to a water bath at 50°C. After Cooling, pour into sterile petri plates. It is advisable not to prepare large volumes which will require prolonged heating

Principle:

Yeast extract provides sources of nitrogen and carbon, as well as vitamins and cofactors required for growth. Xylose, lactose, and sucrose (Saccharose) provide of fermentable carbohydrate. Xylose is fermented by most enteric organisms except Shigella and Providencia. Lysine is added to differentiate Salmonella. As xylose is exhausted, Salmonella organismsdecarboxylate lysine causing reversion to alkaline conditions. Alkaline reversion by other lysine – positive organisms is prevented by excess acid production form fermentation of lactose and sucrose.

Sodium Thiosulfate and Ferric Ammonium citrate allow visualization of hydrogen sulfide production under alkaline conditions. Acidic conditions inhibit the reaction. Phenol red is an indicator. Sodium chloride maintains osmotic balance in the medium. Agar is a solidifying agent.

Sodium Desoxycholate in XLD agar inhibits growth of gram – positive organisms.

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QC Tests – (I)Dehydrated Medium					
Colour:	Pink				
Appearance :	Homogeneous Free Flowing powder				
(II)Rehydrated medium					
pH (post autoclaving/heating) :		7.4 ± 0.2			
Colour (post autoclaving/heating):		Red			
Clarity (post autoclaving/heating)	Clear to very slightly opalescent				
(III)Q.C. Test Microbiological					
Cultural characteristics observed a	after 18	- 24 hrs. at 5	- 37°C.		
MICROORGANISM (ATCC)	GRO	OWTH	COLOUR OF COLONY		
Proteus vulgaris (13315)	Goo	d -luxuriant	Grey with black centres		
Proteus mirabilis (25933)	Goo	d -luxuriant	Grey with black centres		
Salmonella enteritidis (13076)	Goo	d -luxuriant	Red with black centers		
Salmonella paratyphi A	Goo	d -luxuriant	Red		
Salmonella paratyphi B	Goo	d -luxuriant	Red with black centers		
Salmonella typhi (6539)	Goo	d -luxuriant	Red with black centers		
Salmonella typhimurium (14028)	Goo	d -luxuriant	Red with black centers		
Shigellasonnei (25931)	Goo	d -luxuriant	Red		
Shigelladysenteriae (13313)	Goo	d -luxuriant	Red		
Enterobacteraerogenes (13048)	Fair		Yellow		
Escherichia coli (25922)	Fair		Yellow		
Staphylococcus aureus (25923)	Part	ially inhibited	-		

Refer Disclaimer overleaf

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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.							
	2. Red. false – positive colonies may occur with some Proteus and Pseudomonas							
	species.							
	3. Incubation in excess of 48 hours may lead to false – positive results.							
	4. S. paratyphi A, S. choleraesuis, S. pullorum and S. gallinarum may form red							
	colonies without black centers, thus resembling Shigella species.							
	5. Some Proteus strains will give black – centered colonies on XLD Agar.							
Use:	For selective isolation and enumeration of Salmonella typhi and other Salmonella							
	species.							
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.							
Packing:	500 gm. bottle							
Product profile:	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization			
		Preparation (500g)						
B1288	55.43 g/l	9.02L	7.4 <u>+</u> 0.2	Nil	Donot			
					autoclave/overhea			
					t.Boil medium to			
					dissolve			
					w/frequent			
					agitation			

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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