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#### **TECHNICAL SHEET**

B876 M-ENDO AGAF	RLES	
Formula		
Ingredients :	gms/lit.	
Casein enzymic hydrolysate	3.70	
Peptic digest of animal tissue	3.70	
Tryptose	7.50	
Yeast extract	1.20	
Lactose	9.40	
Dipotassium phosphate	3.30	
Monopotassium phosphate	1.00	
Sodium chloride	3.70	
Sodium deoxycholate	0.10	
Sodium lauryl sulphate	0.05	
Sodium sulphite	1.60	
Basic fuchsin	0.80	
Agar	15.00	
Final pH (at 25°C): 7.2 <u>+</u> 0.2		

#### **Directions:**

Suspend 51.05 grams in 980 ml purified/distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C and aseptically add 20 ml of 95% ethanol. Mix and dispense 4 ml amounts into 60 mm Petri plates. In large plates, use sufficient medium to give 1.5 mm depth. DO NOT EXPOSE PLATES TO DIRECT SUNLIGHT.

## Principle:

Casein enzymic hydrolysate, tryptose, peptic digest of animal tissue and yeast extract provide essential nutrients especially nitrogenous for the coliforms. Lactose is the fermentable carbohydrate. Sodium sulphite, sodium deoxycholate and basic fuchsin inhibits the growth of gram – positive organisms. Two phosphates buffer the medium. Agar is the solidifying agent. In the first step of enrichment, cotton absorbent pad is impregnated with Lauryl Sulphate Broth (B220). Membrane filter through which water sample is passed is aseptically placed on it and incubated without inverting for 2 hours at 35°C in a humidatmosphere. After incubation, the membrane filter is aseptically transferred to the M-Endo Agar LES plate and incubated at 35°C for 24 hours. Alternatively, membrane filter pad can be placed inside the lid of Petri plate of M-Endo Agar LES and then impregnated with 2 ml Lauryl Sulphate Broth (B220) and incubated for 1 - 1½ hours at 35°C. In the second step, the prepared membrane filter is kept directly on the agar surface and incubated as described above. Presumptive coliforms produce golden green colonies with metallic sheen within 24 hours of incubation. Coliform density calculation: Note the coliform density in terms of total coliforms/100 ml. Extrapolate the count using membrane filters with 20-80 coliform colonies but not more than 200 of all types per membrane. The formula for calculating the count is as follows: Total coliform colonies/100 ml = coliform colonies /ml of sample filtered x 100

Total comorni colonies/100 mi – comorni colonies /mi or sample intered x 100							
QC Tests - (I)Dehydrated Medium							
Colour:		Light pink to purple					
Appearance :		Homogeneous Free Flowing powder					
(II)Rehydrated medium							
pH (post autoclaving/heating) :		7.2 ± 0.2					
Colour (post autoclaving/heating):		Dark pink to red					
Clarity (post autoclaving/heating):		Slightly opalescent					
(III) Q.C. Test Microbiological							
Cultural characteristics observed af	ter 2	0 - 24 hours at 3	5-37°C.				
MICROORGANISM (ATCC )	MICROORGANISM (ATCC ) GROV		COLOUR OF COLONY (ON MEMBRANE FILTER)				
Enterobacter aerogenes (13048)	Good-Luxuriant		Red to black may have sheen				
Escherichia coli (25922)	Good-Luxuriant		Red to black with sheen				
Salmonella typhi ( 6539 )	Luxuriant		Colourless to very light pink				
Staphylococcus aureus (25923)	Inhibited						
Klebsiella pneumoniae (13883)	Good-luxuriant		Pink to red				
Salmonella Typhimurium (14028) Luxu		iriant	colourless to very light pink				

Refer disclaimer overleaf

Page 01 of 02

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Precautions:	1. For Laboratory Use.										
	2. Follow proper, established laboratory procedures in handling and disposing of										
	infectious materials.										
	3. HARMFUL. Irritating to eyes, respiratory system and skin. Possible risk of irreversible										
	effects. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective										
	clothing. Keep container tightly closed. Target organ(s): Liver, Thyroid.										
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 enumeration of coliforms in water using a twostep membrane filtration technique.										
Storage :	Dehydrated medium- below 30°C Prepared medium- Use freshly prepared medium.										
Packing:	500 gm. bottle										
Product profile:	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization						
		Preparation (500g)	_								
B876	51g/l	9.80L	7.2 <u>+</u> 0.2	95% ethanol	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

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