

TECHNICAL SHEET

B590	MOTILITY – INDOLE – LYSINE MEDIUM (MIL MEDIUM)					
Formula						
Ingredients :		gms/lit.				
Peptic digest of animal tissue		10.00				
Casein enzymic hydrolysate		10.00				
Yeast extract		3.00				
L-Lysine hydrochloride		10.00				
Dextrose (Glucose)		1.00				
Ferric ammonium citrate	0.50					
Bromo cresol purple		0.02				
Agar		2.00				
Final pH (at 25°C) : 6.6 ± 0.2						
Directions :						
Suspend 36.52 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Dispense into tubes in 5 ml amounts. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool the tubes to 45-50°C in an upright position						
Principle :						
Peptic digest of animal tissue and Casein enzyme hydrolysate provide the carbon and nitrogen sources required for good growth of a wide variety of organisms. Yeast Extract provides vitamins and cofactors required for growth. Lysine Hydrochloride is present as a substrate to detect lysine decarboxylase or lysine deaminase activity. Dextrose is an energy source. Ferric Ammonium Citrate is an H ₂ S indicator. Bromo Cresol Purple is a pH indicator. Agar is a solidifying agent used at a low concentration.						
QC Tests – (I) Dehydrated Medium						
Colour :		Cream to greenish yellow				
Appearance :		Homogeneous Free Flowing powder				
(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.6 ± 0.2				
Colour (post autoclaving/heating) :		Reddish purple				
Clarity (post autoclaving/heating) :		Clear to slightly opalescent gel forms in tubes as butts				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.						
MICROORGANISM (ATCC)	MOTILITY	INDOLE PRODUCTION	LYSINE DEAMINASE	LYSINE DECARBOXYLASE		
Escherichia coli (25922)	+	+	-	+		
Enterobacter aerogenes (13048)	+	-	-	+		
Klebsiella pneumoniae (13883)	-	- (+)	-	+		
Proteus vulgaris (13315)	+	+	+	-		
Proteus mirabilis (25933)	+	-	+	-		
Salmonella enteritidis (13076)	+	-	-	+		
Shigella flexneri (12022)	-	- or +	-	-		
Key : Motility=+ = positive reaction, growth away from stabline, -= Negative, growth along the stabline Indole production =+= positive, red ring at the interface of the medium on addition of Kovac's reagent, (+)=occasional. Lysine deaminase=+=positive reaction, redbrown colour reaction at the top Lysine decarboxylase=+=positive reaction, purple colour -= 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 :		For identification of members of Enterobacteriaceae on the motility, lysine decarboxylase, lysine deaminase and indole production.				
Storage :		Dehydrated medium - below 30°C Prepared medium - Between 2 to 8°C.				
Packing :		500 gm. bottle				
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B590		36.52g/l	13.69L	6.6 ± 0.2	NIL	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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