

B1058	HEMMES MEDIUM					
Formula						
Ingredients :		gms/lit.				
Casein enzymic hydrolysate		10.00				
Yeast extract		3.00				
Dextrose		0.30				
Lactose	10.00					
Sucrose	10.00					
Sodium chloride		4.00				
Ferrous sulphate		0.04				
Sodium thiosulphate		0.10				
Phenol red		0.015				
Agar		5.50				
Final pH (at 25°C) : 7.2 ± 0.2						
Directions :						
Suspend 42.95 grams in 950 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense 95 ml amounts into flasks and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to about 50-55°C and aseptically add 5 ml of sterile 40% Urea Solution (BF048) per 95 ml basal medium. Mix well and dispense into sterile test tubes. Allow the tubed medium to cool and solidify in the slanted position to give a butt of at least 3 cm and slant of 2 cm.						
Principle :						
Casein enzymic hydrolysate and yeast extract provide the necessary nutrients to the organisms. Three sugars namely dextrose, lactose and sucrose are the fermentable carbohydrate sources and phenol red is the pH indicator. For indole test, a loopful of medium from the base is transferred to filter paper moistened with a 5% solution p-dimethyl aminobenzaldehyde in 10% HCl.						
QC Tests – (I)Dehydrated Medium						
Colour :	Light yellow to pink					
Appearance :	Homogeneous Free Flowing powder					
(II)Rehydrated medium						
pH (post autoclaving/heating) :	7.2 ± 0.2					
Colour (post autoclaving/heating) :	Red					
Clarity (post autoclaving/heating) :	Clear					
(III)Q.C. Test Microbiological						
Cultural characteristics observed after 18 –24 hrs.at 35-37°C.						
MICROORGANISM (ATCC)	GROWTH	MOTILITY	H ₂ S	UREASE	INDOLE	
Escherichia coli (25922)	Luxuriant	+	-	-	+	
Proteus mirabilis (25933)	Luxuriant	±*	+	+	-	
Salmonella typhimurium (14028)	Luxuriant	+	+	-	-	
Staphylococcus aureus (25923)	Luxuriant	-	-	-	-	
Shigella flexneri (12022)	Luxuriant	-	-	-	-	
Key: * = motility of Proteus species is temperature dependent. It is more pronounced at 20°C and may be absent at 35 – 37°C.						
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 biochemical differentiation of Salmonella and Shigellae species based on dextrose, lactose, sucrose, fermentation, motility, hydrogen sulphide, indole and urease 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
B1058		42.95 g/l	11.641 L	7.2± 0.2	40% Urea Solution (BF048)	121°C/15min.

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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