### **BIOMARK Laboratories-INDIA**

## www.biomarklabs.com

## **TECHNICAL SHEET**

B514	ENDO AGAR				
Formula					
Ingredients:	gms/lit.				
Peptone	10.00				
Lactose	10.00				
Dipotassium phosphate	3.50				
Sodium sulphite	2.50				
Basic fuchsin	0.50				
Agar	15.00				
Final pH (at 25°C):	7.5 <u>+</u> 0.2				
Directions :					

Suspend 41.5 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring into sterile Petri plates. If the solidified culture medium is somewhat too red, then to remove the colour add a few drops (max. 1 ml/litre) of a freshly prepared 10% Sodium sulphite solution and boil.

## Principle:

The medium contains peptone which provide nitrogen, carbon, vitamins and minerals required for bacterial growth. Sodium sulphite and basic fuchsin make this medium selective by suppressing gram-positive organisms. Coliforms produce pink colonies on fermentation of lactose while lactose non-fermenters produce colourless colonies on the medium. With Escherichia coli, this reaction is very pronounced as the fuchsin crystallizes, exhibiting a permanent greenish metallic luster (fuchsin luster) to the colonies.

QC	Tests - (I)Dehydrated Medium					
	Colour:			Light pink to purple		
	Appearance :			Homogeneous Free Flowing powder		
(II)	(II)Rehydrated medium					
	pH (post autoclaving/heating) :			7.5 ± 0.2		
	Colour (post autoclaving/heating):			Orangish pink		
	Clarity (post autoclaving/heating)	:	Clear to slightly opalescent gel with fine precipitate			
(II	I)Q.C. Test Microbiological					
	Cultural characteristics observed after 18			t 35- 37°C.		
	MICROORGANISM (ATCC)	GROWTH		COLONIES		
	Enterobacter aerogenes (13048)	Good-luxuriant		Pink, mucoid		
	Escherichia coli (25922)	Good-luxuriant		Pink to rose red with metallic sheen		
	Salmonella typhi (6539)	Luxuriant		Colourless to pale pink		
	Klebsiella pneumoniae (13883)	Good-luxuriant		Pink, mucoid		
	Proteus vulgaris (13315)	Good-luxuriant		Colourless to pale pink		
	Pseudomonas aeruginosa (27853)	Good-luxuriant		Colourless irregular		
	Streptococcus faecalis (29212)		or	Pink, small		
	Staphylococcus aureus (25923)		d			
	Bacillus subtilis (6633)	Inhibited				
	Enterobacter cloacae (13047)	Good		Pink		
	Salmonella Typhimurium (14028)	Good-luxuriant		Colourless		
	Salmonella Enteritidis (13076)	Good-luxuriant		Colourless		
	Shigella flexneri(12022)	Good-luxuriant		Colourless		
				Page 01 of 02		

# BIOMARK Laboratories-INDIA www.biomarklabs.com

## **TECHNICAL SHEET**

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. Avoid contact with skin and eyes. Do not breathe dust. Wear suitable protective clothing. Keep container tightly closed. Target organ(s):Liver, Thyroid.								
Limitations :	Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.								
	2.Overheating of the medium must be avoided, as it may destroy the productivity of the medium.								
	3. Medium should be stored away from light to avoid photo-oxidation and decrease productivity of the medium.								
Use:	For the confirmation of the presumptive test for members of the coliform group.								
Storage :	Dehydrated medium- below 30°C Prepared medium – 2 to 8°C. Away from light to avoid photooxidation.								
Packing:	500 gm. bottle								
Product	Reconstitution	Quantity on	pH (25°C)	Supplement	Sterilization				
profile:		Preparation (500g)							
B514	41.5g/l	12.048L	7.5 ± 0.2	Nil	121°C / 15 minutes				

Page 02 of 02