

B016	BRILLIANT GREEN BILE AGAR			
Formula				
Ingredients :		gms/lit.		
Peptone		8.25		
Lactose		1.90		
Sodium sulphite		0.205		
Ferric chloride		0.0295		
Monopotassium phosphate		0.0153		
Erioglaucine		0.0649		
Basic fuchsin		0.0776		
Oxgall		0.00295		
Brilliant green		0.0000295		
Agar		10.15		
Final pH (at 25°C) : 6.9 ± 0.2				
Directions :				
Suspend 20.7 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. Cool to 45-50°C. Mix well and pour into sterile Petri plates. For plating 10 ml quantities of water samples, prepare the medium in double strength.				
Principle :				
Brilliant Green Bile Agar contains peptone as a source of carbon, nitrogen, vitamins and minerals. Lactose is a fermentable carbohydrate. Oxgall (bile) and brilliant green inhibit gram-positive bacteria and most gram-negative bacteria except coliforms. Erioglaucine and basic fuchsin together form the indicator system of the medium. Monopotassium phosphate is a buffering agent. Agar is a solidifying agent. Differentiation of the coliforms is based on fermentation of lactose. When the pH is neutral, colour of the medium is blue while acid production from lactose turns the medium pink and colonies appear pink to deep red depending on the pH change. Colonies of coliform bacteria are deep red surrounded by a pink halo against blue background of the medium. Bacteria that do not ferment lactose form colorless to faint pink colonies. Coliform bacteria typically ferment lactose, producing deep red colonies, while Salmonella spp., which do not ferment lactose, produce colorless to faint pink colonies.				
QC Tests - (I) Dehydrated Medium				
	Colour :	Pink to light purple		
	Appearance :	Homogeneous Free Flowing powder		
(II) Rehydrated medium				
	pH (post autoclaving/heating) :	6.9 ± 0.2		
	Colour (post autoclaving/heating) :	Bluish purple		
	Clarity (post autoclaving/heating) :	Slightly opalescent		
(III) Q.C. Test Microbiological				
	Cultural characteristics observed after 18 –24 hours at 35-37°C.			
	MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY	
	Enterobacter aerogenes (13048)	Good-luxuriant	Pink	
	Escherichia coli (25922)	Good-luxuriant	Deep red with bile precipitate	
	Salmonella enteritidis (13076)	Good-luxuriant	Colourless to light pink	
	Staphylococcus aureus (25923)	Inhibited	---	
Precautions :	<ol style="list-style-type: none"> 1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials. 3. 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 :	<ol style="list-style-type: none"> 1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium. 2. It is recommended that the medium be prepared just prior to use and if the medium has to be stored, it should be kept in dark. Brilliant Green Bile Agar medium is sensitive to light, particularly direct sunlight. Direct exposure may exhibit a decrease in the productivity of the medium and also the colour of the medium may change from deep blue to purple or red. 			
Use :	For enumeration of coliform bacteria in water, sewage and food.			
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
B016	20.7g/l	24.154L	6.9 ± 0.2	NIL
				Sterilization
				121°C / 15 minutes