BIOMARK Laboratories-INDIA

www.biomarklabs.com

TECHNICAL SHEET

B060	**WILSON BLAIR AGAR BASE**

Formula

Ingredients :	**gms/lit.**
Peptone special	10.00
Meat Extract B#	5.00
Dextrose	10.00
Sodium chloride	5.00
Agar	30.00

#- Equivalent to Beef extract

Final pH (at 25°C) : 7.3 ± 0.2

Directions :

Suspend 60 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. To sterile melted base, aseptically add 4 ml of 1% brilliant green solution and 70 ml of selective reagent

Selective Reagent

Solution 1: 40 gm sodium sulphite in 100 ml distilled water.
Solution 2: 21 gm dibasic sodium phosphate in 100 ml distilled water.
Solution 3: 12.5 gm bismuth ammonium citrate in 100 ml distilled water.
Solution 4: 0.96 gm ferrous sulphate in 20 ml distilled water with 2 drops of hydrochloric acid.
Prepare each solution separately and then combine. Boil the combined solution until a slate grey colour develops.

Principle :

Peptone special and Meat Extract B provide nitrogenous, carbonaceous compounds and other growth nutrients. Brilliant green dye inhibits all gram-positive bacteria. Dextrose is the fermentable carbohydrate. Ferrous sulphate aids in H2S production. Bismuth is a heavy metal, which is inhibitory to most gram-negative enteric bacilli other than Salmonella. Ferrous sulphate is reduced by Salmonella species in presence of bismuth sulphite and dextrose to form iron sulphide, indicated by black coloured colonies. Disodium hydrogen phosphate buffers the medium well. Sodium chloride balances the osmotic equilibrium. Do not store the medium in refrigerator (4°C) for longer than 2 days, as the medium changes to green colour and reduces its selectivity.

QC Tests – (I)Dehydrated Medium		
	Colour :	Cream to yellow
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	7.3 ± 0.2
	Colour (post autoclaving/heating) :	Basal Medium : Light yellow coloured After addition of the selective reagent and 1% Brilliant green, greenish yellow coloured.
	Clarity (post autoclaving/heating) :	Basal Medium:Clear to slightly opalescent After addition of the selective reagent and 1% Brilliant green, opaque gel forms in Petri plates.
(III)Q.C. Test Microbiological		

Cultural characteristics observed with added 1% Brilliant green and selective reagents after an incubation at 35-37°C for 24-48 hours.

MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY	
Proteus mirabilis (25933)	Luxuriant	Green	
Salmonella typhi (6539)	Luxuriant	Black with sheen	
Salmonella typhimurium (14028)	Luxuriant	Black with sheen	
Escherichia coli (25922)	Inhibited	--	

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 isolation of Salmonella particularly Salmonella typhi after addition of selective reagents.
Storage :	Dehydrated medium- below 30°C Prepared medium – Use freshly prepared medium.
Packing :	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B060	60.0 g/l	8.33 L	7.3 ± 0.2	1% brilliant green & selective reagents	121°C for 15 minutes.