



PRODUCT DATA SHEET

WILSON BLAIR AGAR W/ BG (BRILLIANT GREEN)

TM 917

for isolation and preliminary identification of *Salmonella typhi* from clinical samples

Composition

Ingredients	Gms/Ltr.
Beef extract	5.000
Peptic digest of animal tissue	10.000
Dextrose	5.000
Disodium phosphate	4.000
Ferrous sulphate	0.300
Bismuth sulphite indicator	8.000
Brilliant green	0.025
Agar	20.000

* Dehydrated powder, store in a dry place, in tightly-sealed containers at 24°C and protect from direct Sunlight.

Instructions for Use

Dissolve 52.32 gms in 1000 ml of distilled water. Gently heat with gentle swirling and dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 50 - 55°C. Mix well to disperse precipitate and pour thick plates (25 ml medium per plate). Dry the plates before use, avoiding over drying.

Appearance: Light yellow coloured clear to slightly opalescent

pH (at 25°C): 7.7 ± 0.2

Principle

WILSON BLAIR AGAR W/ BG (BRILLIANT GREEN) is used for isolation and preliminary identification of *Salmonella typhi* from clinical samples. Peptic digest of animal tissue and beef extract provide nitrogenous, carbonaceous compounds and other growth nutrients. Brilliant green dye inhibits all gram-positive bacteria. Dextrose is the fermentable carbohydrate. Ferrous sulphate is an indicator of 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.

Interpretation

Cultural characteristics observed after inoculation (10³ CFU/ml) and incubation at 35 - 37°C for 24 - 48 hours.

Microorganisms	ATCC	Inoculum (CFU)	Growth	Colour of colony
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<i>Escherichia coli</i>	25922	10 ³	Inhibited	-----
<i>Proteus mirabilis</i>	25933	10 ³	Luxuriant	Green
<i>Salmonella Typhi</i>	6539	10 ³	Luxuriant	Black with sheen
<i>Salmonella Typhimurium</i>	14028	10 ³	Luxuriant	Black with sheen

References

1. Wilson and Blair, 1929, J. Pathol. Bacteriol. 29: 310.
2. MacFaddin J., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.