Revision date: 20/02/2024



Reference: DSHB3183

Product:

BISMUTH SULFITE AGAR

Specification

Selective medium for the isolation and differentiation of Salmonella typhi and other salmonellae from food and other origins

Formula * in g/L

Peptone	10,00
Beef extract	
Dextrose	5,000
Disodium phosphate	4,000
Iron sulfate	0.300
Bismuth sulfite	8,000
Brilliant green	0,025
Agar	

Final pH 7,6 ±0,2 at 25 °C

Suspend 52,3 grams of medium in one liter of distilled water. Mix well with frequent agitation. Boil until complete dissolution. AVOID OVERHEATING. DO NOT AUTOCLAVE. Cool to 45°C, mix well and dispense into plates.

Solid medium for the detection of most Salmonella, in particular Salmonella typhi.

Quality control

Incubation temperature: 37°C±1,0 Incubation time: 24-48 h

Inoculum: Practical range ≥ 10³ CFU (specificity)/ 10⁴-10⁶ CFU (Selectivity) according to ISO 11133:2014/Amd 1:2018 **Microorganism Growth Remarks**

Salmonella typhimurium ATCC® 14028 Good Black colonies with bright metallic

Salmonella enteritidis ATCC® 13076 Good Green colonies Escherichia coli ATCC® 25922 Partial inhibition Brown-green colonies

Enterococcus faecalis ATCC® 29212 Inhibited

References

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).

^{*} Adjusted and /or supplemented as required to meet performance criteria

Wilson, W.J., and E.M. Blair 1926 A combination of Bismuth and Sodium Sulfite affording an enrichment and selective medium for the typhoid-paratyphoid groups of bacteria. J. Pathol. Bactend 29:310.