

BISMUTH SULPHITE AGAR

A strongly selective medium for the isolation of *Salmonella* spp. including *Salmonella typhi*.

Dehydrated media	
Code number:	450 g: BSA20450, 4,8 kg: BSA24500
Packaging of 450 g:	450 g agar base + 3 x 1 litre indicator
Packaging of 4,5 kg:	4,5 kg agar base + 30 x 1 litre indicator
Appearance of agar base:	Yellowish, homogeneous hygroscopic powder
Appearance of supplement:	Greenish grey suspension
pH before autoclaving (25 °C):	7,0 – 7,4

Direction: Suspend **15 g agar base** in 400 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool down and add aseptically **100 ml of Bismuth Sulphite Indicator**. Mix well before pouring.

Warning!

- Before use warm up the indicator to room temperature carefully. The crystals precipitated during chilled storage must be redissolved completely. Several refrigeration – warm up process do not cause any damage.
- To ensure homogeneity shake well the indicator before use.
- Immediately after its preparation, the medium has optimal selectivity which gradually decreases over time. For this reason it is not recommended to store the ready to use medium more than 4 days at 2-8 °C.

Bottled media	
Code number:	100 ml: BSA30100, 500 ml: BSA30500
Packaging of 100 ml bottled media:	80 ml agar base + 20 ml indicator
Packaging of 500 ml bottled media:	400 ml agar base + 100 ml indicator
Appearance of agar base:	Yellowish, transparent
Appearance of supplement:	Greenish grey suspension
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes.

Plated media	
Code number:	55 mm: BSA50055, 90 mm: BSA50090
Appearance of plated media:	Light green – cream, homogeneous turbid
pH (25 °C):	7,1 – 7,3

Direction: Media in Petri-dishes are ready to use.

FORMULA FOR COMPLETE MEDIUM in g/l

Peptones	14,700
Glucose	5,000
Ammonium iron(II) sulphate	0,300
Bismuth sulphite indicator	6,000
Brilliant green	0,016
Buffers	5,000
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature. Store the bottled media protected from light at room temperature. Store the indicator and the plated media protected from light at 2-8 °C. Use before the expiry date on the label.

Quality control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Salmonella typhi</i>	ATCC 19430	Good, black centre of the colonies usually appears	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, black colonies with metallic sheen	
<i>Escherichia coli</i>	ATCC 25922	Inhibited, greenish to colourless colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Inhibited, brownish colonies	

References: Wilson and Blair (1972) J. Hyg. Camb. 26: 374.

In vitro diagnostic – for professional use only!