

# Dr. Möller & Schmelz GmbH

### **Corporation for Applied Microbiology**

## **Bismuth Sulfite-NPS**

Version: 11/2022

M&S Item numbers: 1250 (50 / PK) und 1250-H (100 / PK)

Profile: Dehydrated nutrient pad sets 50 mm in petri dishes, sterile

Color: Light green

Storage: Dark and dry at room temperature

Shelf life: 2 years after sterilization

#### **Description and application range**

Bismuth Sulfite-NPS are used for the detection and isolation of *Salmonella sp*. The formulation is acc. to Wilson and Blair, modified. Both brilliant green and bismuth inhibit the growth of accompanying bacteria. Colonies of Salmonella, which are able to produce  $H_2S$  are black because of the formation of iron sulfide. Due to the reduction of bismuth ions to metallic bismuth the colonies get a metallic halo. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd. 2:2020 standard.

#### **Typical composition**

Enzymatic digest of casein	10.0 g/l
Meat extract	5.0 g/l
Dextrose	5.0 g/l
Di-Sodiumhydrogenphosphate	4.0 g/l
Bismuth sulfite	8.0 g/l
Ferric sulfate	0.3 g/l
Brilliantgreen	0.025 g/l

Final pH: 7.5 ± 0.2 at 25 °C

#### Microbiological quality control

#### **Bacterial contamination**

Incubation: aerobically at room temperature for 3 days, specification: no growth

### **Productivity** qualitative analysis

Incubation: aerobic at 36  $\pm$  1 °C for 24  $\pm$  3 h

Microorganism	Test strain	Specification	Appearance
Salmonella thyphymurium	WDCM 00031	Good growth	Black with metallic halo, "fish-eye"
Escherichia coli	WDCM 00012	Poor growth	Greenish-brown