# Dr. Möller & Schmelz GmbH

## **Corporation for Applied Microbiology**

### mFC-NPS

Version: 11/2022

M&S Item numbers: 1100 (50 / PK) und 1100-H (100 / PK)

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

Color: Purple

Storage: Dark and dry at room temperature

Shelf life: 2 years after sterilization

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

mFC-NPS are used for the detection and colony count of fecal coliforms in water, food and other samples. With mFC-NPS fecal coliforms can be cultivated selectively. Bile salts inhibit the growth of gram-positive bacteria and while all coliforms are able to use Lactose as carbon source, only fecal coliforms can grow at an incubation temperature of 44 °C. Aniline blue and Rosolic acid form the color indicator system. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd 2:2020 standard.

#### **Typical composition**

Enzymatic digest of casein	15.0 g/l
Yeast extract	3.0 g/l
Sodium chloride	5.0 g/l
Bile salts	0.1 g/l
Lactose	12.5 g/l
Aniline blue	0.1 g/l
Rosolic acid	0.1 g/l

Final pH: 7.4 ± 0.2 at 25 °C

#### Microbiological quality control

#### **Bacterial contamination**

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

#### **Productivity** quantitative analysis

Incubation: aerobically at 44  $\pm$  1 °C for 21  $\pm$  3 h, approx. inoculum: 50 – 120 CFU

Microorganism	Test strain	Specification	Appearance
Escherichia coli	WDCM 00179	P <sub>R</sub> ≥ 0.7	Blue colonies

P<sub>R</sub> productivity rate (recovery rate)



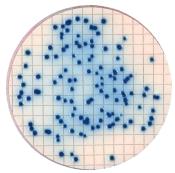
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#### **Selectivity** qualitative analysis

Incubation: aerobically at  $44 \pm 1$  °C for  $21 \pm 3$  h, approx. inoculum: 10,000 - 1,000,000 CFU

Microorganism	Test strain	Specification	Appearance
Staphylococcus aureus	WDCM 00034	Full inhibition	Fully inhibited
Klebsiella aerogenes	WDCM 00175	Full inhibition	Fully inhibited



Pure culture of E. coli after 20 h at 44°C