

## **Endo-NPS**

Version: 01/2020  
M&S item numbers: 1090 (50 / PK) and 1090-H (100 / PK)  
Profile: Dehydrated nutrient pad sets 50 mm in petri dishes, sterile  
Color: Pink  
Storage: Dark and dry at room temperature  
Shelf life: 1 years after sterilization

### **Description and application range**

Endo-NPS are used for the detection of *Escherichia coli* and other coliform bacteria in water, wastewater and other samples. The formulation is modified acc. to "Standard Methods for the Examination of Water and Wastewater". Gram positive bacteria are inhibited by fuchsin and sodium sulfite, whereas gram-negative organisms show good growth. Bacteria that are able to metabolize Lactose develop red to dark red colonies due to the presence of fuchsin. For most of the *E. coli* strains this reaction is so intense that the fuchsin is crystallized giving the typical green metallic sheen. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd 1:2018 standard.

### **Typical composition**

Enzymatic digest of casein	10.0 g/l
Lactose	10.0 g/l
di-Potassium hydrogen phosphate	2.5 g/l
Sodium sulfite	3.3 g/l
Fuchsin	0.3 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 36 ± 2 °C for 21 ± 3 h, approx. inoculum: 80 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Escherichia coli</i>	WDCM 00012	$P_R \geq 0,7$	Dark red with green metallic sheen
<i>Enterobacter aerogenes</i>	WDCM 00175	$P_R \geq 0,7$	Red to dark red

**Selectivity** qualitative analysis

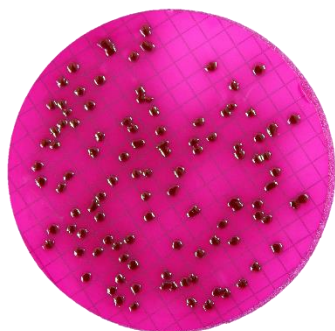
Incubation: aerobically at  $36 \pm 2$  °C for  $21 \pm 3$  h, approx. inoculum: 10,000 – 1,000,000 CFU

Microorganism	Test strain	Specification	Appearance
<i>Enterococcus faecalis</i>	WDCM 00009	Partial inhibition	-

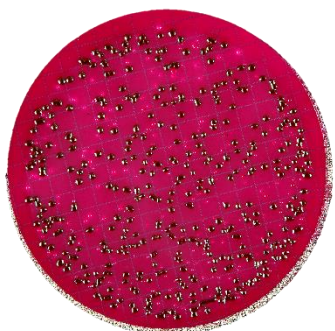
**Specificity** qualitative analysis

Incubation: aerobically at  $36 \pm 2$  °C for  $21 \pm 3$  h, approx. inoculum: 80 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Pseudomonas aeruginosa</i>	WDCM 00024	Growth	Beige



Pure culture of *E. coli* after 24 h at 37 °C



Mixed culture of *E. coli* and *Citrobacter freundii* after 24 hours at 37 °C