



Lactose Tergitol TTC-NPS

Version: 11/2022
M&S Item numbers: 1092 (50 / PK) und 1092-H (100 / PK)
Profile: Dehydrated nutrient pad sets 50 mm in petri dishes, sterile
Color: Blue
Storage: Dark and dry at room temperature
Shelf life: 2 years after sterilization

Description and application range

Lactose Tergitol TTC-NPS are used for the detection and colony count of *Escherichia coli* and coliforms in drinking water and food. The formulation complies with DIN EN ISO 9308-1 (2000). With Lactose Tergitol TTC-NPS coliform bacteria can be cultivated selectively and differentiated. The component Tergitol-7 inhibits the growth of gram-positive bacteria. TTC (2,3,5-Triphenyltetrazoliumchloride) is metabolized to red Formazan by most organisms. Coliforms are able to use Lactose. The resulting acidic metabolite causes a color change of the pH-indicator Bromothymolblue from blue to yellow. 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
Yeast extract	6.0 g/l
Lactose	20.0 g/l
Meat extract	5.0 g/l
Bromothymolblue	0.05 g/l
Tergitol-7	0.1 g/l
TTC	0.025 g/l

Final pH: 7.2 ± 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: 50 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Escherichia coli</i>	WDCM 00179	$P_R \geq 0.5$	Yellow later orange, with yellow halo
<i>Klebsiella aerogenes</i>	WDCM 00175	$P_R \geq 0.5$	Yellow to brown, with yellow halo, occ. with reddish center

P_R productivity rate (recovery rate)



Selectivity qualitative analysis

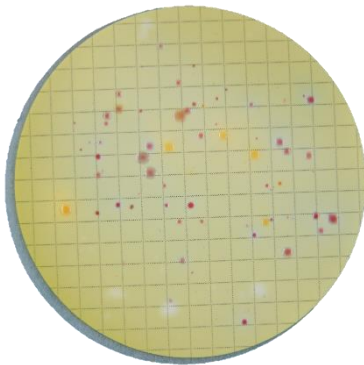
Incubation: aerobically at 36 ± 2 °C for 21 ± 3 h, approx. inoculum: 10,000 – 1,000,000 CFU

Microorganism	Test strain	Specification	Appearance
<i>Enterococcus faecalis</i>	WDCM 00009	Full inhibition	Fully inhibited

Specificity qualitative analysis

Incubation: aerobically at 36 ± 2 °C for 21 ± 3 h, approx. inoculum: 50 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Pseudomonas aeruginosa</i>	WDCM 00025	Growth	Red with light blue halo



Mixed culture with *Escherichia coli* (yellow), *Klebsiella pneumoniae* (brownish yellow) and *Pseudomonas aeruginosa* (reddish with blue halo) after 24 hours at 37 °C