



Malachite green-Broth

Version: 07/2022
M&S item numbers: 5150 (25 x 50 ml, single concentrated)
5050 (4 x 100 ml in 250 ml bottles, double concentrated)
Color: Green
Storage: Dark and dry at 4 – 12 °C
Shelf life: 3 months after production

Description and application range

Malachite green-Broth is used for enrichment and detection of *Pseudomonas aeruginosa* from water, mineral water and other samples (e.g. German mineral- and table water regulation). The complex composition of the broth enhances the growth of *Ps. aeruginosa*. Malachite green inhibits the development of accompanying bacteria. Furthermore, the incubation temperature of 37°C inhibits the growth of other *Pseudomonas* species. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd. 2:2020 standard.

Typical composition (single concentration)

Enzymatic digest of casein	5.0 g/l
Meat extract	3.0 g/l
Dipotassiumhydrogenphosphate	0.37 g/l
Malachite green	0.01 g/l

Final pH: 7.3 ± 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: aerobically at 36 ± 2 °C for 44 ± 4 h

Microorganism	Test strain	Specification	Appearance
<i>Pseudomonas aeruginosa</i>	WDCM 00024	Turbidity, color change, flower formation	Turbidity, color change from green to yellow, flower formation
<i>Pseudomonas aeruginosa</i>	WDCM 00025	Turbidity, color change, flower formation	Turbidity, color change from green to yellow, flower formation



Selectivity qualitative analysis

Incubation: aerobically at 36 ± 2 °C for 44 ± 4 h, approx. inoculum: 10,000 – 1,000,000 CFU

Microorganism	Test strain	Specification	Appearance
<i>Escherichia coli</i>	WDCM 00012	Full inhibition	Fully inhibited



Left side: positive control of *Pseudomonas aeruginosa* with color change and flower formation on top of the broth
Right side: negative control inoculated with *Escherichia coli*