

BAT-Agar

Version: 01/2020
M&S item numbers: 5012 (4 x 125 ml) and 4012 (24 x 10 ml)
Profile: Plastic bottles and glass tubes
Color: Beige
Storage: Dark and dry at 4 – 12 °C
Shelf life: 8 months

Description and application range

BAT-Agar is used for the detection and determination of *Alicyclobacillus* sp. in fruit juices and other beverages and samples. Bacteria of genus *Alicyclobacillus* have optimum growth conditions at low pH and increased temperatures. The composition of the BAT-medium additionally supports their development. The growth of accompanying organisms is widely inhibited by the low pH value and the high incubation temperature. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd 1:2018 standard.

Typical composition

| | |
|------------------------------|----------|
| Yeast extract | 2.0 g/l |
| Dextrose | 5.0 g/l |
| Potassiumdihydrogenphosphate | 3.0 g/l |
| Magnesium sulfate | 0.5 g/l |
| Calcium chloride | 0.25 g/l |
| Ammonium sulfate | 0.2 g/l |
| Trace element solution | 1.0 ml/l |
| Bacteriological Agar | 15.0 g/l |

Final pH: 4.0 ± 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 44 ± 1 °C for 48 ± 2 h, approx. inoculum: 1,000 – 10,000 CFU

| Microorganism | Test strain | Specification | Appearance |
|---|-------------|---------------|----------------|
| <i>Alicyclobacillus acidoterrestris</i> | DSM 2498 | Good growth | White to beige |
| <i>Escherichia coli</i> | WDCM 00012 | No growth | - |
| <i>Enterococcus faecalis</i> | WDCM 00009 | No growth | - |



Alicyclobacillus acidoterrestris directly on BAT-Agar



Alicyclobacillus acidoterrestris on a membrane Filter on BAT Agar