



## Beer-Agar

Version: 07/2022  
M&S item number: 5015 (4 x 250 ml)  
Profile: Polycarbonate bottles  
Color: Green  
Storage: Dark and dry at 4 – 12 °C  
Shelf life: 8 months after production

### Description and application range

Beer-Agar is used for the detection and enumeration of beer-spoiling bacteria, i.e. *Lactobacillus* sp. and *Pediococcus* sp. The composition of beer agar provides a complex source of N-compounds from peptone and yeast extract and dextrose and lactose as C-compounds. The addition of beer and tomato juice supports the development of the target organisms. The low pH-value widely inhibits the growth of bacteria except those that are acid tolerant. Actidione (Cycloheximide) inhibits the development of yeasts and molds. Bromocresolgreen as pH-indicator shows the formation of acids by microbial activities. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd. 2:2020 standard.

### Typical composition

Enzymatic digest of casein	7.5 g/l
Yeast extract	6.1 g/l
Dextrose	16.0 g/l
Lactose	5.0 g/l
Potassiumdihydrogenphosphate	0.31 g/l
Sodium chloride	0.006 g/l
Ferrous sulfate	0.006 g/l
Manganese sulfate	0.006 g/l
L-Cystein chloride	0.05 g/l
Beer	250 ml/l
Tomato juice, filtered	500 ml/l
Tween 80	0.2 ml/l
Bromocresolgreen	0.02 g/l
Actidione (Cycloheximide)	0.004 g/l
Bacteriological Agar	16.0 g/l

Final pH: 5.5 ± 0.2 at 25 °C

### Microbiological quality control

#### Bacterial contamination

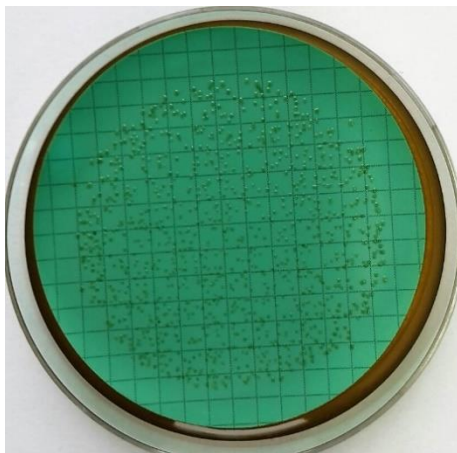
Incubation: aerobically at room temperature for 3 days, specification: no growth



**Productivity** qualitative analysis

Incubation: microaerophilic at  $30 \pm 1$  °C for  $72 \pm 4$  h; smear method on agar direct

Microorganism	Test strain	Specification	Appearance
<i>Lactobacillus sakei</i>	DSM 20017	Growth	Greenish, good growth
<i>Lactobacillus lactis</i>	DSM 20481	Growth	Green, very good growth
<i>Pediococcus damnosus</i>	WDCM 00022	Growth	Yellow-greenish, very good growth
<i>Pediococcus pentosaceus</i>	WDCM 00158	Growth	Green, very good growth
<i>Leuconostoc pseudomesent.</i>	DSM 20193	Growth	Green, good growth
<i>Escherichia coli</i>	DSM 1576	Inhibited growth	Inhibited growth
<i>Saccharomyces cerevisiae</i>	DSM 70449	No growth	No growth



Pure culture of *L. sakei* after 72 hours at 30°C microaerophilic; membrane-filtration method