

Lysine-Agar

Version: 10/2017
M&S item numbers: 4055 (25 x 20 ml) and 5042 (4 x 250 ml)
Profile: Glass tubes and polycarbonate bottles
Color: Beige
Storage: Dark and dry at 4 – 12 °C
Shelf life: 8 months

Description and application range

Lysine-Agar is used for the determination and colony count of “wild yeasts” in beverages, i.e. in beer. The composition of the medium supports the growth of wild yeasts, which are able to use lysine as sole source of nitrogen. The low pH inhibits the development of accompanying bacteria. The medium is manufactured and quality tested in compliance with ISO 11133:2014 standard.

Typical composition

Dextrose	55.0 g/l
Potassiumdihydrogenphosphate	2.0 g/l
Magnesium sulfate	1.0 g/l
Calcium chloride	0.2 g/l
Sodium chloride	0.1 g/l
Lysine	1.2 g/l
Inosit	0.03 g/l
Vitamin mix	5 drops
Bacteriological Agar	16.0 g/l

Final pH: 5.5 ± 0.2

Microbiological quality control

Bacterial contamination

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

Productivity qualitative analysis

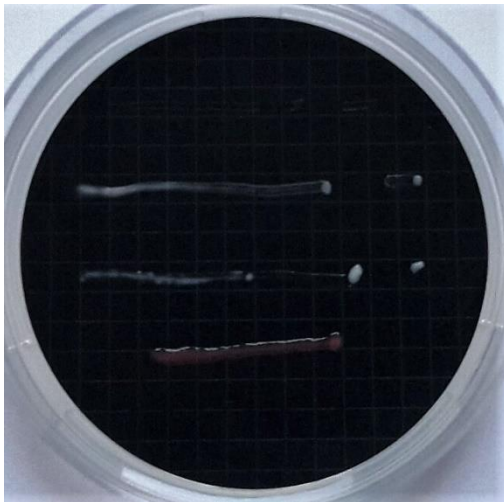
Incubation: aerobically at 30 ± 1 °C for 48 ± 3 h, approx. inoculum: 80 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Schizosaccharomyces pombe</i>	DSM 70576	Growth	Beige
<i>Zygosaccharomyces rouxii</i>	DSM 7525	Growth	Beige
<i>Brettanomyces bruxellensis</i>	DSM 70001	Growth	Beige
<i>Rhodotorula bacarum</i>	DSM 70854	Growth	Red

Selectivity qualitative analysis

Incubation: aerobically at 30 ± 1 °C for 48 ± 3 h, approx. inoculum: 10,000 – 1,000,000 CFU

Microorganism	Test strain	Specification	Appearance
<i>Escherichia coli</i>	WDCM 00012	Full inhibition	-
<i>Saccharomyces cerevisiae</i>	DSM 70449	Inhibited growth	-



← Inhibited growth of *Saccharomyces cerevisiae*

← *Zygosaccharomyces rouxii*

← *Brettanomyces bruxellensis*

← *Rhodotorula bacarum*

← Full inhibition of *Escherichia coli*