

Lysine-NPS

Version: 10/2017
M&S item numbers: 1095 (50 / PK) and 1095-H (100 / PK)
Profile: Dehydrated nutrient pad sets 50 mm in petri dishes, sterile
Color: Beige
Storage: Dark and dry at room temperature
Shelf life: 2 years after sterilization

Description and application range

Lysine-NPS are used for the determination and colony count of “wild yeasts” in beverages, i.e. in beer. The formulation is acc. to Morris and Eddy, modified. Wild yeasts are able to use lysine as sole source of nitrogen. Pitching yeasts used e.g. in the brewery industry do not have that ability. Hence, the detection of a wild yeasts contamination within a yeast culture sample is possible by using Lysine-NPS. Important is that after filtration of the sample and before placing the membrane onto the pad the membrane filter is washed with sterile saline or another nitrogen-free buffer, in order to eliminate all present nitrogen residues. The low pH – value 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
Inositol	0.03 g/l
Vitamin mix	5 drops

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 quantitative analysis

Incubation: aerobically at 30 ± 1 °C for 72 ± 4 h, approx. inoculum: 80 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Brettanomyces bruxellensis</i>	DSM 70001	$P_R \geq 0,5$	Beige
<i>Rhodotorula bacarum</i>	DSM 70854	Growth	Red