

TECHNICAL DATA SHEET

Article No. 9535

Lysine Medium, ready-to-use culture medium

SPECIFICATION

Ready-to-use solution, sterile, bottles. Solid and differential medium for the isolation, cultivation and enumeration of wild yeast in the brewery industry.

Colour: Sand yellow
pH: 4.8 ± 0.2 at 25 °C

COMPOSITION IN G/ L

Glucose	44.50000
Agar	17.80000
Lysine	1.00000
Potassium dihydrogen phosphate	1.78000
Magnesium sulfate	0.89000
Calcium chloride	0.17800
Sodium chloride	0.08900
Inositol	0.02000
Supplements	0.00815
H ₃ BO ₃	8.9 µg
Biotin	2.0 µg
Folic ac	1.0µg
Potassium lactate 50%	10.0 ml
Lactic acid 10	1.0 ml

PACKAGE DETAILS

9535-10x100 ml

Volume 100 ± 3 ml
Bottle size 125 ml
Packaging unit 10 bottles

1 box with 10 x 100 ml in 125 ml bottles. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended.



DESCRIPTION/TECHNIQUE

Description

Most of the *Saccharomyces* strains employed in the brewery industry and other fermentative industries do not use lysine, whereas the wild strains do. This medium uses this property to differentiate both types of yeasts.

Technique

To use, the contents of the bottle should be poured into plates. The melting of the culture medium should be carried out according to the manufacturer's instructions, either in a water bath (100 °C) or microwave oven. Never apply direct heat to melt a medium. The melting temperatures and times depend on the shape of the container, the volume of medium and the heat source. Before melting any medium loosen the screwcap of the container to avoid breaking the container. The medium should be melted only once and used. Media with agar should not be melted repeatedly as their characteristics change with each remelting. Overheating should be avoided as much as prolonged heating, especially with regard to media with an acidic or alkaline pH.

Morris and Eddy recommended surface inoculation of a washed aliquots from the pitching yeast mass: 0.2 mL of a suspension of 10^7 cells/mL is the best. Sample is incubated at 25°C and examined daily, enumerating all the colonies that have grown (Lysine +).

Results are referred to as wild cells per million of cells from the original inoculum.

When the results exceed 10000 (10^4), it is considered that the wild yeast population may be dangerous.

MICROBIOLOGICAL CONTROL

Melting - pour plates - inoculation Practical range 100 ± 20 CFU. min. 50 CFU (productivity) / 10^4 - 10^6 CFU (selectivity)

Aerobic. Incubation at 22.5 ± 2 °C 3-5 days (moulds and yeast).

Microorganism	Growth
<i>Sacch. cerevisiae carlsbergiensis</i> ATCC® 2700	Slight background film
<i>Pichia fermentans</i> ATCC® 10651	Good. White colonies

Sterility control:

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.

REFERENCES

- ATLAS, R.M., L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- FOWELL, R.R. (1965) The identification of wild yeast colonies on Lysine Agar. J. appl. Bact. 28. 373-383.
- MORRIS, E.O., A.A. EDDY (1957) Method for the measurement of wild yeast infection in pitching yeast. J. Inst. Brew. 63(1)34-35.
- WALTERS L.S. & M.R. THISELTON (1953) The utilization of Lysine by yeasts. J- Inst. Brew. 59. 401-404.

STORAGE

8 - 25 °C



SHELF LIFE

12 months unopened from date of manufacture

updated: 25.08.2022

