

TECHNICAL DATA SHEET

Article No. 9373

Nutrient Agar ISO, ready-to-use culture medium

SPECIFICATION

Prepared medium. Solid culture medium for general purpose use with less fastidious organisms according to ISO 8914 and ISO 16266.

Colour: White
pH: 7.4 ± 0.2 at 25 °C

COMPOSITION IN G/ L

Meat extract	1.00
Yeast extract	2.00
Peptone	5.00
Sodium chloride	5.00
Agar	15.00

PACKAGE DETAILS

9373-10x100 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

Nutrient Agar ISO is a simple medium based on meat infusions, complemented with yeast extract to reinforce its nutrient qualities as well as its growth factors. It is most suitable for general routine work and can support the growth of common organisms, even those considered somewhat fastidious with regard to nutrient requirements. The incorporation of sodium chloride allows for the addition of blood if necessary, even though this is not an optimal medium for very fastidious organisms.



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.

Once melted pour the plates using aseptic techniques. To inoculate, follow standard laboratory methods or the applicable norms. Spiral plate method, streak plating, econometric methods, dilution banks, spread plating etc.

MICROBIOLOGICAL CONTROL

Melt Medium - Pour plates - inoculation Practical range 100± 20 CFU. min. 50 CFU (productivity)/ 10⁴ -10⁶ (selectivity). Microbiological control according to ISO 11133:2014/A1:2018.

Aerobiosis. Incubation at 36 ± 2 °C, reading at 21 ± 3 h

Microorganism	Growth
<i>Bacillus subtilis</i> ATCC® 6633, WDCM 00003	Good (≥70 %)
<i>Pseudomonas aeruginosa</i> ATCC® 27853, WDCM 00025	Good (≥70 %)
<i>Escherichia coli</i> ATCC® 8739, WDCM 00012	Good (≥70 %)
<i>Salmonella typhimurium</i> ATCC® 14028, WDCM 00031	Good (≥70 %)
<i>Staphylococcus aureus</i> ATCC® 6538, WDCM 00032	Good (≥70 %)

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.
- DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA. Washington. DC.USA.
- EUROPEAN NORME (EN) 12780:2002 Water Quality - Detection and enumeration of *Pseudomonas aeruginosa* by membrane filtration.
- ISO 8914-1 Standard (1990) Microbiology- General guidance for the detection of *Vibrio parahaemolyticus*.
- ISO 16266 Standard (2006) Water Quality - Detection and enumeration of *Pseudomonas aeruginosa* - Method by membrane filtration.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.

STORAGE

8 - 25 °C

SHELF LIFE

16 months unopened from date of manufacture

last updated: 25.08.2022

