

PRODUCT CODE: 443792

Nutrient Agar (ISO 6579, ISO 10273, ISO 19250)(Prepared Plate (@ 55 mm)) for microbiology

Specification

Solid culture medium for general purpose use with less fastidious organisms according to ISO standards.

Presentation

30 Prepared Plates	Packaging Details	Shelf life	Storage
55 mm Plates for filtration purposes with: 9 ± 1 ml	1 box containing 5 plastic bags with 6 plates of 55 mm / bag	6 months	2-25°C

Description and Technique

Description

Nutrient Agar 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

The technique of inoculation used in these plates is the membrane filtration technique. It is found in the various harmonized pharmacopoeias and applicable ISO norms.

Filter the sample through a $0.45 \mu\text{m}$ pore membrane and apply it onto the surface of the agar. Incubate the plates aerobically at $36^\circ\text{C} \pm 2$ for 22 ± 2 h. (Incubation times greater than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications)

After incubation, enumerate all the colonies on the surface of the membrane. Calculate total microbial count per ml of sample by multiplying the average number of colonies per membrane by the inverse dilution factor.

Report results as Colony Forming Unit (CFU's) per ml along with incubation time and temperature.

Quality control

Physical/Chemical control	Microbiological control	Sterility control
Color: Yellowish. pH: 7.4 ± 0.2 at 25°C	Membrane Filtration /Practical range 100±20 CFU; Min. 50 CFU (Productivity)./10 ⁴ -10 ⁶ CFU for Selectivity. Microbiological control according to ISO 11133:2014 Aerobiosis. Incubation at 36 ± 2°C, reading at 21±3 h.	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
Microorganism	Growth	
<i>Bacillus subtilis</i> ATCC® 6633, WDCM 00003	Good (≥70 %)	
<i>Salmonella typhimurium</i> ATCC® 14028, WDCM 00031	Good (≥70 %)	
<i>Staphylococcus aureus</i> ATCC® 6538, WDCM 00032	Good (≥70 %)	
<i>Escherichia coli</i> ATCC® 8739, WDCM 00012	Good (≥70 %)	
<i>Ps. aeruginosa</i> ATCC® 27853, WDCM 00025	Good (≥70 %)	

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