NUTRIENT AGAR UNE-EN 12780, EN ISO 16266

CAT Nº: 1156

For the confirmation of *Pseudomonas aeruginosa* by membrane filtration

FORMULA IN g/l

Peptone	5.00	Beef Extract	1.00
Sodium Chloride	5.00	Bacteriological Agar	15.00
Yeast Extract	2.00		

Final pH 7.4 ± 0.2 at 25ºC

PREPARATION

Suspend 28 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 118ºC for 15 minutes. Cool to 45-50ºC, mix well and dispense into plates. The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

NUTRIENT AGAR is a confirmation medium to be used with the presumptive positive colonies obtained in Pseudomonas CN Agar Base (Cat. 1153) or King B Medium (Cat. 1154).

Pseudomonas aeruginosa is an opportunist pathogen for humans, capable of growing in water with a low concentration of nutrients. This is why natural mineral water and spring water are *Pseudomonas aeruginosa* free at the time of their commercialization. This microorganism can also be found in swimming pool water.

Peptone and Beef extracts provide the nitrogen, vitamins, minerals and amino acids nutrient source; Yeast extract is a vitamins source, particularly of the B-group, essential for bacterial growth; Sodium chloride maintains the osmotic balance and the Bacteriological agar is the solidifying agent.

Subculture positive colonies from the media mentioned and incubate for 22±2 hours at a temperature of 36 ± 2°C.

After incubation, for those cultures which initially did not show fluorescence, the oxidase reduction test is carried out, and fluorescence production and ammonia production capacity from acetamide are investigated in those cultures which are oxidase-positive. For those cultures which initially presented fluorescence, ammonia production capacity from acetamide is studied.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium, after incubation at a temperature of 36±2°C and observed after 22±2 hours.

Microorganisms	Growth	Oxidase
Pseudomonas aeruginosa ATCC 25783	Good	+
Escherichia coli ATCC 25922	Good	-

BIBLIOGRAPHY

UNE-EN 12780 Quality of water. Identification and enumeration of *Pseudomonas aeruginosa* by membrane filtration.
EN ISO 16266 Water quality -- Detection and enumeration of *Pseudomonas aeruginosa* -- Method by membrane filtration

ISO

STORAGE

Once opened keep powdered medium closed to avoid hydration.