Reference: 06-124LYO1 **Scharlau Microbiology - Technical Data**

Product: # Nalidixic Acid Selective Supplement

Specification

Selective supplement for isolation of *Pseudomonas aeruginosa spp.* formulated according to ISO standard.

Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze dried vials Vial with: 3 ± 0.1 g	23x60 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	49 months	2-25 ºC

Composition

Compositon (g/vial)

Nalidixic Acid sodium salt..... 0.0075
Excipient (sufficient amount)

Reconstitute the original freeze-dried vial by :
Sterile Distilled Water.....6 ml

Note: : Each vial is sufficient to supplement 500ml of Cetrimide Agar Base CN.

Description /Technique

Description:

The Nadilix Sodium Salt added to the appropriate medium base, in order to obtain Cetrimide (CN) agar, gives improved performances respect to the Cetrimide agar.

This supplement in combination with the reduction of cetrimide, allows a better recovery of *Pseudomonas aeruginosa spp.* in front of *Klebsiella, Proteus* and *Providencia spp* , that are the common contaminants of conventional cetrimide.

A blue-green or brown pigmentation, or fluorescence are the charateristics of *Pseudomonas spp.*

Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with the sterile diluent in aseptic conditions and add it to 500 ml of agar base cooled to 50ºC temperature.
Do not overheat once supplemented.

Pour the complete medium into Petri dishes and, once solidified on a flat surface, spread the plates by streaking or spiral method.
Incubate the plates in aerobic atmosphere at 35±2ºC for 24-48h.

Incubation times longer than those mentioned above or different incubation temperatures may be requied depending on the sample or the specifications.

After incubation, count all the colonies that have appeared onto the surface of the agar.

Presumptive isolation of *Pseudomonas* sp must be confirmed by further tests.

Quality control

Physical/Chemical control

Color : White-Gray

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Distribute the complete medium, cooled to 50 ºC, into 90 mm plates

Incubate according instructions for complete medium indicated in COMPOSITION.

Aerobiosis. Incubation at 35 ± 2 ºC, reading at 24-48 hours.

Microorganism	Growth
Ps. aeruginosa ATCC® 27853, WDCM 00025	Good
Ps. aeruginosa ATCC® 9027, WDCM 00026	Good
Escherichia coli ATCC® 8739, WDCM 00012	Inhibited

Sterility control

Add 5 ml of the sample to:
100 ml TSB and 100 ml Thioglycollate.
Incubation 48 h at 30-35 ºC and 48 h at 20-25 ºC: NO GROWTH.

Bibliography

· BROWN, V.L. & E.J.L. LOWBURY (1965) Use of an improved Cetrimide Agar Medium and of culture methods for P. aeruginosa. J., Clin. Pathol. 18:752.

· EN 12780 Standard (2002) Water Quality. Detection and enumeration of P. aeruginosa by membrane filtration.

· GOTO S. & S. ENOMOTO (1970) Nalidixic acid cetrimide agar. A new selective plating medium for the selective isolation of P. aeruginosa. Jpn. J. Microbiol. 14:65.

· ISO 16266 Standard (2006) Water Quality. - Detection and enumeration of Pseudomonas aeruginosa. - Method by membrane filtration.

· KING, E.O., M.K. WARD & E.E. RANEY (1954) Two simple media for the demonstration of pyocianin and fluorescein. J. Lab. Clin. Med. 44:301.

· ROBIN, T. & J.M. JANDA (1984) Enhanced recovery of P. aeruginosa from diverse clinical specimens on a new selective agar. Diag. Microbiol. Infect Dis. 2:207.

· SCHWEIZERISCHE LEBENMITTELSBUCH (2005) Kap. 56 Mikrobiologie. Bundesamt für Gesundheit. Direktionsbereich Verbraucherschutz. Bern.