

# Product: Selective Supplement for CN

Specification				
Sterile selective supplement for the isolation	on of <i>Pseudon</i>	nonas spp. according to ISO.		
Presentation				
10 Freeze dried vials with: $3 \pm 0.1$ g	22±0.25	<b>Packaging Details</b> 22±0.25 x 55±0.5 mm glass vials, tag labelled, white plastic cap - 10 vials per box.		Storage 2-25 °C
Composition				
Compositon (g/vial)		Neter Frederickie er fürient te ernelenent		
Cetrimide Nalidixic acid, sodium salt		Note: Each vial is sufficient to supplement 500 ml of Pseudomonas Agar Base (ISO).		
Reconstitute the original freeze-dried vial by adding :				
Sterile distilled water	6 ml			

### **Description /Technique**

#### Description:

CN selective supplement is added to Pseudomonas Agar Base in order to obtain a complete medium suitable for the isolation of *Pseudomonas spp.* 

Pseudomonas CN Agar is a selective medium recommended by ISO for the enumeration of *Pseudomonas spp* in water. Gelatin peptone and enzymatic digest of casein provide nitrogen, vitamins, minerals and amino acids essential for growth and allows the growth of a great number of *Pseudomonas spp*. The potassium sulfate and magnesium chloride help the formation of pigmentation (pyocyanin). The addition of cetrimide, make the medium more selective for *Pseudomonas spp*.

Cetrimide, inhibits the Gram-positive bacteria and supports the growth of *Pseudomonas spp*, (including *P. aeruginosa*), with nalidixic acid inhibiting most other Gram negative bacteria.

### Technique:

Reconstitute the vial with 6 ml sterile diluent in aseptic conditions and add it to 500 ml of Pseudomonas Agar Base (ISO) cooled to 50 °C. Pour into MF plates.

Do not overheat once supplemented.

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

Incubate the plates right side up aerobically at 25 - 30 °C for 48 h.

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,..)

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

Each laboratory must evaluate the results according to their specifications.

Presumptive isolation of Pseudomonas spp. must be confirmed by further microbiological or biochemical tests.

Colonies which show a positive oxidase reaction are Pseudomonas spp.

### **Quality control**

**Physical/Chemical control** 

Color : White

#### **Microbiological control**

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

Distribute the complete medium, cooled at 50 °C, in filtration plates

Incubate according instructions for complete medium indicated in COMPOSITION.

Microbiological control according to ISO 11133:2014/A1:2018.

Microorganism	Growth
Ps. aeruginosa ATCC <sup>®</sup> 9027, WDCM 00026	Good
Escherichia coli ATCC <sup>®</sup> 8739, WDCM 00012	Inhibited

### **Sterility control**

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



Product: Selective Supplement for CN

## 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.10/01/202010/01/202010/01/202010/01/2020