

PSEUDOMONAS AGAR BASE

CN PSEUDOMONAS SUPPLEMENT CFC PSEUDOMONAS SUPPLEMENT

Base medium, selective supplements and ready to use plates
for the isolation and enumeration of *Pseudomonas aeruginosa* spp. in water samples and
Pseudomonas spp. in meat products

Pseudomonas Agar Base – Typical Formula (g/l)

Pancreatic Digest of Gelatin	16.0
Acid Digest of Casein	10.0
Magnesium Chloride	1.4
Potassium Sulphate	10.0
Agar	11.5

CN Pseudomonas Supplement (vial contents for 500 ml of medium)

Cetrimide	100 mg
Nalidixic Acid	7.5 mg

CFC PSEUDOMONAS SUPPLEMENT (vial contents for 500 ml of medium)

Cetrimide.....	5 mg
Acido fusidico.....	5 mg
Cefalosporina.....	25 mg

Pseudomonas CN Selective Agar (ready to use plates 55 and 90 mm)

Typical Formula (g/l)	
Pancreatic Digest of Gelatin	16.0
Acid Digest of Casein	10.0
Magnesium Chloride	1.4
Potassium Sulphate	10.0
Agar	14.0
Cetrimide	200 mg
Nalidixic Acid	15 mg
Glycerol	10 ml

DIRECTIONS

Suspend 24.5g in 500 ml of cold distilled water and add 5 ml of glycerol. Heat to boiling with frequent agitation and sterilise by autoclaving at 121°C for 15 minutes. Cool to approximately 50°C and use this base for the addition of CN Supplement or CFC Supplement.

CN Supplement (ISO 16266)

Add the contents of one vial of CN Pseudomonas Supplement (cat. N° 4240046) reconstituted with 2ml of sterile distilled water/ethanol (1:1) to 500 ml of Pseudomonas Agar Base. Mix well and pour into sterile Petri dishes.

Final pH 7,1 ± 0,2.

CFC Supplement (ISO 13720)

Add the contents of one vial of CFC Pseudomonas Supplement (cat. N° 4240075) reconstituted with 2ml of sterile distilled water/ethanol (1:1) to 500 ml of Pseudomonas Agar Base. Mix well and pour into sterile Petri dishes.

Final pH 7,2 ± 0,2.

DESCRIPTION

Pseudomonas Agar Base supplemented with glycerol and CN Supplement corresponds to the medium recommended by ISO 16266 for the isolation and enumeration of *Pseudomonas aeruginosa* in water samples; the medium base supplemented with glycerol and CFC Supplement corresponds to the

medium recommended by ISO 13720 for the isolation and enumeration of *Pseudomonas* spp in meat products.

TECHNIQUE**Waters**

Filter through a 0.45µm membrane the appropriate volume of water according to the degree of pollution expected. Transfer the filter membrane on the surface on ready to use plates prepared with CN Supplement. Incubate at 36°C+/- 2° for 24-48 hours. Count all colonies that produce green/blue (pyocyanin) colour as confirmed *P.aeruginosa*. Consider presumptively as *P.aeruginosa* all the colonies fluorescent under a Wood's lamp and with typical smell and also the reddish brown colonies that do not fluoresce. Confirm the presumptive colonies using the medium containing acetamide (Acetamide Broth REF 5510101), oxidase test and King's B medium (REF 401961), as described in ISO 16266.

Meat products

Transfer on the surface of 2 plates prepared with CFC Supplement 0.1 ml of the initial suspension. Repeat these operation with subsequent dilutions taking two other CFC agar plates, using a new sterile pipette for each decimal dilution.

Spread the liquid over the surface of the agar with a sterile spreader until the surface is completely dry. Incubate the dishes at 25° for 40-48 h. Count the colonies on the plates containing 15-150 colonies and select random five colonies from each retained plate for confirmation tests.

Confirm the presence of *Pseudomonas* with oxidase test and fermentation of glucose on Purple Glucose Agar (REF 401970) or O/F Hugh Leifson Base (REF 401836) supplemented with glucose.

Colonies showing a positive oxidase reaction and absence of glucose fermentation shall be considered as *Pseudomonas* colonies.

USER QUALITY ASSURANCE (37°C-24hrs)

Productivity control

P.aeruginosa ATCC 9027: growth, blue-green colonies

Selectivity control

E.coli ATCC 25922: inhibited

E.faecalis ATCC 19433: inhibited

STORAGE

Dehydrated medium: keep the bottle tightly closed away from bright light at 10-30°C and use before the expiry date on the label.

Selective Supplements and Ready to use plates: store at 2-8°C and use before the expiry date on the label.

User prepared plates: 1 month at 2-8°C

WARNING

For *in vitro* diagnostic use only. This products should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.

Pseudomonas Agar Base is classified as NON Hazardous but contains Magnesium Chloride in a concentration higher than 1% ; CN Supplement is classified as T (toxic) and CFC Supplement is classified as Xn (harmful)

Consult the material safety data sheets before the use.

REFERENCE

ISO 16266:2006 Water quality – Detection and enumeration of *Pseudomonas aeruginosa* by membrane filtration.

ISO 13720:1995 Meat and meat products — Enumeration of *Pseudomonas* spp

PACKAGING

4019602	Pseudomonas Agar Base	500g (10 l)
4240046	CN Pseudomonas Supplement	10 vials, each for 500ml of medium
4240075	CFC Pseudomonas Supplement	10 vials, each for 500ml of medium
421015	Glycerol	100 ml
491960	Pseudomonas CN Selective Agar	30 ready to use plates (55 mm)
541960	Pseudomonas CN Selective Agar	20 ready to use plates (90 mm)