



## ***Pseudomonas Agar Base***

(C.F.C./C.N. Agar)

**LAB 108**

### **Description**

The base medium is a modification of King's medium A which uses magnesium and potassium salts to enhance production of the pigments pyocyanin (green) and fluorescein (detected by U.V./blue light). The medium is made selective for *Pseudomonas aeruginosa* by the addition of X107 C.N. supplement. Alternatively the medium can be made selective for *Pseudomonas* species generally by the addition of X108 C.F.C. supplement. This medium can be made selective for the isolation of *Burkholderia cepacia* by the addition of X140.

Formula	g/litre
Acid Hydrolysed Casein	10.0
Gelatin Peptone	16.0
Potassium sulphate	10.0
Magnesium chloride	1.4
Agar No. 2	11.0

### **Method for reconstitution**

Weigh 48.4 grams of powder and disperse in 1 litre of deionised water. Add 10ml of glycerol. Sterilise by autoclaving at 121°C for 15 minutes. Allow the medium to cool to 47°C then add the contents of 2 vials of either X107 C.N. supplement or X108 C.F.C. supplement. Mix well and pour into Petri dishes.

**Appearance:** Pale straw, opaque.

**pH:** 7.1 ± 0.2

Minimum Q.C. organisms: *P. aeruginosa* NCIMB 50067  
*E. coli* (inhibition) NCIMB 50034

**Storage of Prepared Medium:** Plates – up to 7 days at 2-8°C in the dark.

**Inoculation:** Surface, spread 0.1 to 0.5ml of sample over entire surface.

**Incubation:** 25-30°C aerobically for 48 hours.

**Interpretation:** Count all colonies as *Pseudomonas species*. Colonies that exhibit the pyocyanin and fluorescein pigments count as *P. aeruginosa*.

<b>Growth Characteristics</b>				
organism	colony size (mm)	shape & surface	colour	fluorescence
<i>Ps. aeruginosa</i>	2.0-3.0	CV.Cr.D.	Green/Blue	yes
<i>P. fluorescens</i>	2.0-3.0	CV.Cr.D.	Yellow	yes
<i>P. fragi</i>	1.0-3.0	CV.Cr.D.	Grey	no
<i>P. maltophila</i>	2.0-3.0	CV.Cr.G.	Grey	no
<i>P. putida</i>	2.0-3.0	F.Cr.D.	Grey	no

### **References**

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