



## Nutrient Agar ISO 16266

Medium for cultivating non-fastidious organisms and confirming *Pseudomonas aeruginosa*, according to ISO 16266.

### DESCRIPTION

Nutrient Agar ISO 16266 is a medium used for the cultivation of non-fastidious organisms from water samples. This medium is formulated according to ISO 16266 for the detection and enumeration of *Pseudomonas aeruginosa* in water by the membrane filtration technique.

### TYPICAL FORMULA\*

	(g/litre)
Peptone	5.0
Meat Extract	1.0
Yeast Extract	2.0
Sodium Chloride	5.0
Agar	15.0
Final pH 7.4 ± 0.2 at 25°C	

\*Adjusted and/or supplemented as required to meet performance specifications.

### METHOD PRINCIPLE

Peptone and meat extract provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Sodium chloride maintains the osmotic balance of the medium. Agar is the solidifying agent.

### PREPARATION

<u>Dehydrated medium</u>	Suspend 28 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes.
<u>Medium in bottles</u>	Melt the content of the bottle in a water bath at 100°C (loosing the cap partially removed) until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

### TEST PROCEDURE

According to ISO 16266, transfer the membrane and presumptive *Pseudomonas aeruginosa* to the plate medium.

Incubate aerobically at 36 ± 2°C for 20-24 hours.

Alternatively, the medium can be inoculated by spread plating or direct streaking of the sample over the agar surface.

### INTERPRETING RESULTS

Observe for colony growth. Confirm *P. aeruginosa* by performing the oxidase test (ref. 88029).

### STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed. Store bottles, tubes and prepared plates at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

Avoid quick temperature shifts of plated medium to prevent condensation.

### SHELF LIFE

Dehydrated medium: 4 years.

Medium in bottles: 2 years.

Medium in slant tubes: 1 year.

Ready-to-use plates: 6 months.

**QUALITY CONTROL**

**Appearance of Dehydrated Medium:** Free-flowing, homogeneous, beige.

**Appearance of Prepared Medium:** Slightly opalescent, light amber.

**Expected Cultural Response:**

Control strain	Inoculum	Incubation	Specification
<i>Pseudomonas aeruginosa</i>	50-100 CFU	20-24 h 36 ± 1°C	Good growth
WDCM 00025 (ATCC 27853, NCTC 12903)			
<i>Escherichia coli</i>			
WDCM 00013 (ATCC 25922, NCTC 12241)			

Please refer to the actual batch related Certificate of Analysis (CoA).

**WARNING AND PRECAUTIONS**

**For professional use only.** Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

**DISPOSAL OF WASTE**

Disposal of waste must be carried out according to national and local regulations in force.

**BIBLIOGRAPHY**

See the references at the end of this document.

**TABLE OF SYMBOLS**

See the table of symbols at the end of this document.

**The product is available in the various configurations listed below.** There may be additional product ref. numbers as well. For an updated listing of available products, visit [liofilchem.com](http://liofilchem.com)

Product	Format	Packaging	Ref.
Nutrient Agar ISO 16266	Plate 90 mm	20 plates	10044
Nutrient Agar ISO 16266	Slant tube	10 x 7 ml	30083
Nutrient Agar ISO 16266	Bottle	6 x 100 ml	402190
Nutrient Agar ISO 16266	Bottle	6 x 200 ml	412190
Nutrient Agar ISO 16266	Bottle	6 x 500 ml	470060
Nutrient Agar ISO 16266	Dehydrated media	100 g	620036
Nutrient Agar ISO 16266	Dehydrated media	500 g	610036
Nutrient Agar ISO 16266	Dehydrated media	5 kg	6100365

This IFU document and the SDS are available from the online Support Center:

[liofilchem.com/ifu-sds](http://liofilchem.com/ifu-sds)