

# **ACETAMIDE BROTH**

Dehydrated medium for the confirmation test of Pseudomonas aeruginosa in bottled water

TYPICAL FORMULA (g/L)	
Acetamide	10.0
Sodium chloride	5.00
Dipotassium phosphate	
Monopotasssium phosphate	0.73
Magnesium sulphate	0.5
Phenol red	0.012
Final nH 7 0 + 0 2	

#### **DESCRIPTION**

ACETAMIDE BROTH is a dehydrated medium used for the confirmation of Pseudomonas aeruginosa in bottled water.

#### PRINCIPLE

**ACETAMIDE BROTH** contains acetamide which, as a sole source of carbon in the medium, is used for the confirmation and identification of *Pseudomonas aeuruginosa*. It uses the ability of non-fermenting Gram-negative bacteria to deaminate the acetamide, the resulting alkalinization shown by a color change from orange-red to purple-red.

Acetamide deamination is accomplished by *P.aeruginosa*, *P.acidovorans*, Group III (*Achromobacter xylosoxidans*), and *Alcaligenes odorans*.

Acetamide is the single carbon source; the potassium salts have a high buffering capacity; sodium chloride maintains the osmotic balance and phenol red is the pH indicator.

#### **PREPARATION**

Suspend 17,2 g of powder in 1 litre of distilled or deionized water. If needed, heat gently to dissolve completely. Sterilize by filtration. Aseptically dispense into sterile test tubes.

#### TECHNIQUE

Inoculate with one or two loopfuls of growth from a presumptive fresh medium (ASPARAGINE ENRICHMENT BROTH code 610138) . Incubate at 36 +/- 1°C for 2-4 days.

#### INTERPRETATION OF RESULTS

A positive reaction is indicated by a color change of the tube from orange-red to an intense purple-red. The presence of *P.aeruginosa* is confirmed by a positive asparagine test and a positive acetamide test.

## STORAGE

The powder is very hygroscopic: store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared media at 2-8°C.

# WARNING and PRECAUTIONS

The product is classified as hazardous by current legislation. It is recommended that the Safety Data Sheet be consulted before use. The product must be used only by properly trained operators.

### DISPOSAL of WASTE

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

# **REFERENCES**

- Kelly, N.M., C.T. Keans (1983). Acetamide broth for isolation of *Pseudomonas aeruginosa* from patients with cystic fibrosis. J.Clin.Microbiol. **17**:159:163.
- CeNAN (1982) Técnicas para el Examen microbiològico de Alimentos y Bebidas. Madrid



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# **PRODUCT SPECIFICATIONS**

NAME

**ACETAMIDE BROTH** 

### **PRESENTATION**

Dehydrated culture medium

#### STORAGE

10-30°C

#### PACKAGING

Code	Content	Packaging
610313	500 gr	500 gr of powder in plastic bottle
620313	100 gr	100 gr of powder in plastic bottle

# pH OF THE MEDIUM

 $7.0 \pm 0.2$ 

### USE

ACETAMIDE BROTH is a dehydrated medium used for the confirmation of Pseudomonas aeruginosa in bottled water.

#### TECHNIQUE

Refer to technical sheet of the product.

# APPEARANCE of the MEDIUM

**Dehydrated medium** 

Appearance: homogeneous.

Colour: beige
Prepared medium
Appearance: clear
Colour: orange-red

# SHELFLIFE

4 years

# QUALITY CONTROL

1. Control of general characteristics, label and print

2. Sterility control

7 days at 25  $\pm$  1°C, in aerobiosis 7 days at 36  $\pm$  1°C, in aerobiosis

3. Microbiological control

Inoculum for productivity: 10-100 UFC/ml Inoculum for selectivity: 10<sup>4</sup>-10<sup>5</sup> UFC/ml Inoculum for specificity: ≤ 10<sup>4</sup> UFC/ml

Inoculum for specificity:  $\leq 10^4$  UFC/ml Incubation conditions: up to 4 days at 36 +/- 1°C ,in aerobiosis

Microorganisms		Growth	Acetamide deamination
Escherichia coli	ATCC 25922	-	
Proteus mirabilis	ATCC 29906	-	
Pseudomonas aeruginosa	ATCC 9027	+	+
Pseudomonas aeruginosa	ATCC 27853	+	+

# TABLE of SYMBOLS

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Symbol	Meanings
REF	Catalogue number
	Manufacturer
X	Temperature limitation
Σ	Kit content
$\square$	Use by
LOT	Batch code
8	Do not reuse
Ţ <b>i</b>	Consult accompanying documents



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