

**ACETAMIDE BROTH (DOUBLE PACK)****TM 351**

For the differentiation of non fermentative gram negative bacteria like *Pseudomonas aeruginosa*

Composition

Ingredients	g/L
Part I	
Acetamide	10.000
Part II	
Sodium chloride	5.000
Dipotassium hydrogen phosphate	1.390
Potassium dihydrogen phosphate	0.730
Magnesium sulphate	0.500
Phenol red	0.012

*Dehydrated powder, store in a dry place, in tightly-sealed containers below 2 - 8°C and protect from direct Sunlight.

Instructions for Use

Dissolve 7.63g of Part II in 1000ml of distilled water. Mix properly and add 10g of Part I to the Part II solution. Gently heat to boil with gentle swirling and dissolve the medium completely. Dispense the media in tubes and sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool the tubes at room temperature before use.

Appearance: Orange colour, clear solution

pH (at 25°C): 7.0 ± 0.2

Principle

ACETAMIDE BROTH (DOUBLE PACK) is used for the differentiation of non fermentative gram negative bacteria like *Pseudomonas aeruginosa* in water samples.

Medium contains buffers; Dipotassium hydrogen phosphate and Potassium dihydrogen phosphate, Sodium chloride for osmotic balance, Magnesium sulphate for normal cell division and growth and Agar as a solidifying agent.

Phenol red indicator to detect the deamination of acetamide in the medium to distinguish *P. aeruginosa* from other species of *Pseudomonas*. *P. aeruginosa* produces enzyme acylamidase, which is responsible for deamination of acetamide (sole carbon source). Deamination leads to formation of ammonia, which makes the medium alkaline, results in medium colour change orange to purplish red.

Microbiological parameters (Growth promotion test)

Cultural characteristics observed after inoculation (10³CFU/ml) and incubation at 35 ± 2°C for 18 - 24 hours.



PRODUCT DATA SHEET

Test strains	ATCC	Inoculum (CFU/ml)	Growth	Deamination reaction
<i>Pseudomonas aeruginosa</i>	25753	10 ³	Good	Positive, purplish red colour
<i>Escherichia coli</i>	8739	10 ³	Poor	Negative, no colour change
<i>Proteus mirabilis</i>	77289	10 ³	None	Negative, no colour change

References

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