



## Antibiotic Assay Medium B

M1346

Antibiotic Assay Medium B is used for the microbiological assay of Colistimethate sodium using *Bordetella bronchiseptica* ATCC 4617 and *Escherichia coli* ATCC 10536.

### Composition\*\*

Ingredients	Gms / Litre
Casein enzymic hydrolysate	17.000
Papaic digest of soyabean meal	3.000
Sodium chloride	5.000
Dipotassium hydrogen phosphate	2.500
Dextrose	2.500
Agar	15.000
Final pH ( at 25°C)	7.3±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 45.0 grams in 1000 ml distilled water containing 10ml Polysorbate 80. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Adjust the pH of the medium, using freshly prepared buffer solution.

### Principle And Interpretation

Antibiotic Assay Medium B is used for the microbiological assay of Colistimethate sodium. Combination of casein enzymic hydrolysate and papaic digest of soyabean meal provides essential nutrients for the growth of test organisms. Dextrose provides fermentable source of carbon, and enhances the growth of test organisms. Phosphates in the medium enhances buffering action and sodium chloride maintains osmotic equilibrium. It is recommended by various pharmacopoeia (1,2)

Freshly prepared plates should be used for antibiotic assays. Test organisms are inoculated in sterile seed agar cooled to 40-45°C and spread evenly over the surface of solidified base agar. All conditions in the microbiological assay must be controlled carefully. The use of standard culture media in the test is one of the important step for the good results

### Quality Control

#### Appearance

Cream to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

#### Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

#### Reaction

Reaction of 4.5% w/v aqueous solution at 25°C. pH : 7.3±0.2

#### pH

7.10-7.50

#### Cultural Response

M1346: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Antibiotics assayed
<i>Bordetella bronchiseptica</i> ATCC 4617	50-100	luxuriant	>=70%	Colistimethate sodium
<i>Escherichia coli</i> ATCC 10536	50-100	luxuriant	>=70%	Colistimethate sodium

## Storage and Shelf Life

Store below 30°C in tightly closed container and use freshly prepared medium . Use before expiry date on the label.

## Reference

1. British Pharmacopoeia, 2009, British Pharmacopoeia Commission
- 2 European Pharmacopoeia, 2009, European Pharmacopoeia Commission

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### Disclaimer :

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