# Antibiotic Assay Medium No. 9

## Intended Use

Antibiotic Assay Medium No.9 is used as base layer medium for assaying product containing Polymyxin B.

## Summary

Antibiotic Assay Medium No.9 is widely recommended for assay of Polymyxin B, Colistimethate sodium and Colistin using *Bordetella bronchiseptica* as test organism. This medium is numerically identical with the name assigned by Groove and Randall. Carbenicillin assay is also performed using this medium with *Pseudomonas aeruginosa*.

## Principle

Casein enzymic hydrolysate and papaic digest of soybean meal serves as source for essential nutrients. Dextrose stimulates the growth by providing carbon and energy. Phosphates in the medium enhance buffering action and sodium chloride maintains osmotic equilibrium in the medium. Agar concentration provides control over the diffusion activity of Polymixin B antibiotics and provides solid substratum to support the seed agar layer.

## Formula*

| **Ingredients** | **g/L** |
|---|---|
| Casein Enzymic Hydrolysate | 17.0 |
| Papaic Digest of Soybean Meal | 3.0 |
| Dextrose | 2.5 |
| Sodium Chloride | 5.0 |
| Dipotassium Phosphate | 2.5 |
| Agar | 20.0 |
| Final pH (at 25°C) | 7.2 ± 0.1 |

*Adjusted to suit performance parameters

## Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

## Specimen Collection and Handling

Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

## Directions

1. Suspend 50 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

## Quality Control

**Dehydrated Appearance**: Cream to yellow coloured, homogeneous, free flowing powder.
**Prepared Appearance**: Light yellow coloured, very slightly opalescent gel forms in petridishes.
**Cultural Response**: Cultural characteristics observed after an incubation at 36°C -37.5°C for 18-24 hours.

| **Organism (ATCC)** | **Growth** | **Antibiotics Assayed by Cylinder Plate Method** |
|---|---|---|
| *Bordetella bronchiseptica* (4617) | Good | Polymyxin B, Colistin Colistimethate |
| *Pseudomonas aeruginosa* (25619) | Good | Carbenicillin |

## Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

## Warranty

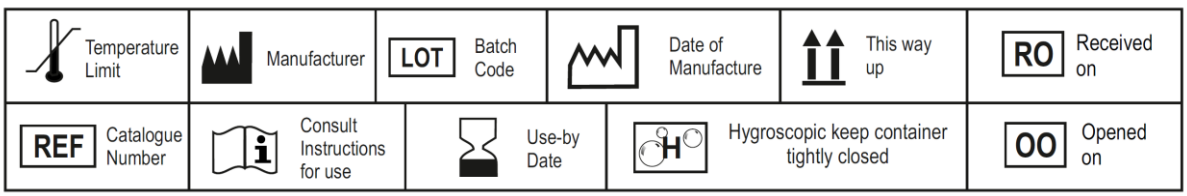
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

## Reference


1. Grove and Randall, 1955, Assay Methods of Antibiotics Medical Encyclopedia, Inc. New York.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.


## Product Presentation:

| Cat No. | Product description | Pack Size |
|---|---|---|
| 201010210500 | Dehydrated Culture Media | 500 g |

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**Disclaimer**

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.