

Rhizobium Medium

Intended Use

Rhizobium Medium is used for cultivation and isolation of *Rhizobium* species.

Summary

Rhizobium Medium is used in the large-scale production of legumes and in the isolation from root nodules. Rhizobium Medium is recommended for isolation and cultivation of mannitol-positive *Rhizobium* species. It is also useful for the maintenance of *Rhizobium* species by adding extra 1% mannitol to the medium as specified by the American Type Culture Collection.

Principle

The medium is well buffered for pH changes and osmotic changes by presence of phosphate and sodium chloride salts. Yeast extract provides nitrogenous nutrients. Mannitol is the energy source while magnesium sulphate provides essential ions.

Formula*

Ingredients	g/L
Mannitol	10.0
Dipotassium Phosphate	0.5
Magnesium Sulphate	0.2
Yeast Extract	1.0
Sodium Chloride	0.1
Agar	20.0
Final pH (at 25°C)	6.8 ± 0.2

*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 31.80 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.
4. Mix well and pour into sterile petridishes.

Quality Control

Dehydrated Appearance: Off white to cream coloured, homogenous, free flowing powder.

Prepared Appearance: Off white to cream coloured, clear to slightly opalescent with a slight precipitated gel forms in petridishes.

Cultural Response: Cultural characteristics is observed after an incubation at 25°C-30°C for 4 days.

Organism (ATCC)

Rhizobium meliloti (9930)

Rhizobium japonicum (10324)

Growth

Good

Good

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. ATCC Catalogue of Bacteria and Bacteriophages, 1992, 18th Ed., American Type Culture Collection, Rockville, MD.
2. Subba Rao N. S, Soil Microorganisms and Plant Growth- (Oxford and IBH Publishing Co.).
3. Data on file: Microxpress[®], A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201180110500	Dehydrated Culture Media	500 g

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.
