

Asparagine Proline Broth

Intended Use

Asparagine Proline Broth is used for cultivation of *Pseudomonas aeruginosa* by membrane filtration technique.

Summary

Pseudomonas aeruginosa is one of the major contaminants of natural, fresh and recreational water, coming from wastewater. *P. aeruginosa* is an opportunistic pathogen that can multiply in waters in presence of sufficient nutrients. It produces a water soluble, fluorescent pigment in media containing asparagine and ethanol. Asparagine Proline Broth is recommended for cultivation of *P. aeruginosa* by the membrane filter technique. The medium is recommended by BIS.

Principle

Medium contains both the enantiomeric forms of Asparagine, which is readily utilized by *Pseudomonas* for their growth. Phosphate and sulphates provide ions for the growth as well as buffers the medium to promote the growth of the organism.

Formula*

Ingredients	g/L
DL-Asparagine	2.0
L-Proline	1.0
Magnesium Sulphate	0.5
Dipotassium Phosphate	1.0
Anhydrous	
Potassium Sulphate	10.0
Final pH (at 25°C)	7.2 ± 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 14.5 g of the powder in 1000 mL purified / distilled water containing 25mL ethanol and mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Dispense as desired.

Quality Control

Dehydrated Appearance: White coloured, homogenous, free flowing powder.

Prepared Appearance: Colourless, clear solution without any precipitate.

Cultural Response: Cultural characteristics was observed after an incubation of 30°C-35°C for 24-48 hours.

Organism (ATCC)*Pseudomonas aeruginosa* (27853)*Escherichia coli* (25922)**Growth**

Good with greenish yellow pigment

Partial inhibition

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. Bureau of Indian Standards (BIS), 2005, Draft IS 13428:2005.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201010320100	Dehydrated Culture Media	100 g
201010320500	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.
