



Asparagine Broth for Pseudomonas

M1903

It is used for presumptive identification and enumeration of *Pseudomonas aeruginosa* by MPN method.

Composition**

Ingredients	Gms / Litre
DL-Asparagine	3.000
Anhydrous dipotassium hydrogen phosphate	1.000
Magnesium sulphate, heptahydrate	0.500

Final pH (at 25°C) 7.05±0.15

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 4.24 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Pseudomonas is an opportunist pathogen for humans, capable of growing in water with low concentration of nutrients. *Pseudomonas aeruginosa* is one of the major contaminants of natural, fresh and recreational water(1). The presence of high numbers of *Pseudomonas aeruginosa* in potable water, can be associated with complaints about taste, odour and turbidity (2).

Asparagine broth is an enrichment broth for *Pseudomonas aeruginosa*. The composition is strictly mineral base with Asparagine as the sole source of nitrogen. The Potassium salts act as a buffer system and Magnesium sulfate is a magnesium ion required in a large variety of enzymatic reactions, including DNA replication and also acts as a buffer.

Pseudomonas aeruginosa hydrolyze asparagine to aspartic acid.

Quality Control

Appearance

White to cream homogeneous free flowing powder

Colour and Clarity of prepared medium

Colourless clear solution, without any precipitate

pH

6.90-7.20

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-72 hours.

Cultural Response

Organism	Growth	Inoculum (CFU)	Pigment
Cultural response			
<i>Pseudomonas aeruginosa</i> ATCC 9027	luxuriant	50-100	yellow green
<i>Pseudomonas aeruginosa</i> ATCC 27853	luxuriant	50-100	yellow green
<i>Pseudomonas aeruginosa</i> ATCC 25668	luxuriant	50-100	yellow green

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. APHA. Standard Methods for Examination of Water and wastewater, 14th ed. 1975. 2. WHO (ed.) (2011) Guidelines for drinking-water quality, 4th edition.

Revision : 02 / 2015



Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.