

Product Data Sheet

PIKOVSKAYA'S BROTH (MEDIUM)

Product No. GB-DCM-00449-1A

INTENDED USE

For cultivation phosphate solubilizing microorganisms.

PRODUCT SUMMARY

Pikovskaya's Broth is a modification of Pikovskaya's agar medium originally modified by Sundara Rao and Sinha for culturing phosphate solubilizing microorganisms. Both inorganic and organic phosphates exist in soil. Many naturally occurring soil fungi and bacteria are phosphate solubilizers and they play an important role in maintaining phosphorus balance of crop plants. This fact is exploited in culturing phosphate solubilizers which are able to solubilize bound phosphates.

Product Specifications

Ingredients	Gms / Ltr
Yeast extract	0.500
Dextrose	10.000
Calcium phosphate	5.000
Ammonium sulphate	0.500
Potassium chloride	0.200
Magnesium sulphate	0.100
Manganese sulphate	0.0001
Ferrous sulphate	0.0001

PRINCIPLE

This medium consists of Yeast extract which provides nitrogen and other nutrients necessary to support bacterial growth. Dextrose acts as an energy source. Different salts and yeast extract supports the growth of organisms. Phosphatesolubilizing bacteria will grow on this medium and form a clear zone around the colony, formed due to phosphate solubilization in the vicinity of the colony.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.



INSTRUCTION FOR USE

- Dissolve 16.3 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : White to light yellow homogeneous free flowing powder.

Appearance of prepared medium: White with flocculant precipitate opaque gel forms in tubes.

pH (at 25°C) : 7.1±0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Phenylalanine deaminase	Incubation Temperature	Incubation Period
Aspergillus niger	16404	50-100	Luxuriant	Positive reaction, clear zone surrounding the colony	35-37°C	48 Hours
Bacillus subtilis	6633	50-100	Good	Moderate clear zone surrounding the colony	35-37°C	48 Hours
Pencillium notatum	10108	50-100	Luxuriant	Positive reaction, clear zone surrounding the colony	35-37°C	48 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	Positive reaction, clear zone surrounding the colony	35-37°C	48 Hours

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

This product is for research use only.

Goslar Biotech, 255A Barking Road East Ham, London E6 1LB, United Kingdom
Email: info@goslarbiotech.com, Website: www.goslarbiotech.com