

TECHNICAL SHEET

B632	PIKOVSKAYA'S AGAR					
Formula						
Ingredients :		gms/lit.				
Yeast extract		0.50				
Dextrose		10.00				
Calcium phosphate		5.00				
Ammonium sulphate		0.50				
Potassium chloride		0.20				
Magnesium sulphate		0.10				
Manganese sulphate		0.0001				
Ferrous sulphate		0.0001				
Agar		15.00				
Final pH (at 25°C) : Self						
Directions :						
Suspend 31.3 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.						
Principle :						
Phosphate exists in both organic as well as inorganic forms in soil. Organic matter derived from dead and decaying plant debris is rich in organic sources of phosphorus. However, plants are able to utilize phosphorus from soil only in the free available form. Soil phosphates are rendered available either by plant roots or by soil microorganisms. Therefore, phosphate-dissolving soil organisms play a part in correcting phosphorus deficiency of crop plants. Pikovskayas Agar was modified for detection of phosphate-solubilizing bacteria from soil. Yeast extract in the medium 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. Phosphate-solubilizing 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.						
QC Tests - (I) Dehydrated Medium						
	Colour :	White to light yellow.				
	Appearance :	Homogeneous Free Flowing powder				
(II) Rehydrated medium						
	PH (post autoclaving/heating) :	Self				
	Colour (post autoclaving/heating) :	White with flocculant precipitate				
	Clarity (post autoclaving/heating) :	Opaque				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 48 hrs at 35-37°C.						
	MICROORGANISM (ATCC)	GROWTH	PHOSPHATE SOLUBILIZATION			
	Aspergillus niger (16404)	Luxuriant	positive reaction, clear zone surrounding the colony			
	Penicillium notatum (10108)	Luxuriant	positive reaction, clear zone surrounding the colony			
	Pseudomonas aeruginosa (27853)	Luxuriant	positive reaction, clear zone surrounding the colony			
	Bacillus subtilis (6633)	Good	moderate clear zone surrounding the colon			
Precautions :		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
Limitations :		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
Use :		For detection of phosphate solubilizing soil microorganisms.				
Storage :		Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
Packing :		500 gm. bottle				
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B632	31.3g/l	15.974L	Self	NIL	121°C / 15 minutes	

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 BIOMARKLABORATORIES publications.

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