B932	ASHBY'S MANNITOL AGAR
Formula	
Ingredients :	**gms/lit.**
Mannitol	20.00
Dipotassium hydrogen phosphate	0.20
Magnesium sulphate	0.20
Sodium chloride	0.20
Potassium sulphate	0.10
Calcium carbonate	5.00
Agar	15.00

Final pH (at 25°C) : 7.4 ± 0.2

Directions :

Suspend 40.7 grams in 1000 ml purified / distilled water. Heat just to boiling. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.
Note: Due to presence of calcium carbonate, the prepared medium forms opalescent solution with white precipitate.

Principle :

Ashby's Mannitol Agar are formulated as described by Subba Rao. It is used for isolation of Azotobacter, a nonsymbiotic nitrogen fixing bacteria which uses mannitol or glucose as a carbon source and atmospheric nitrogen as nitrogen source. Sodium chloride maintains osmotic balance of the medium. Dipotassium phosphate provides buffering to the medium. Atmospheric nitrogen is used as the source of nitrogen. Various essential ions required for promoting growth of Azotobacter are also available in this medium.

Type of specimen : Soil samples.

Specimen Collection and Handling:
For soil samples, follow appropriate techniques for sample collection and processing as per standard and current guidelines of soil microbiology.
After use, contaminated materials must be sterilized by autoclaving before discarding.

QC Tests – (I)Dehydrated Medium		
	Colour:	White to cream
	Appearance:	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating):	7.4 ± 0.2
	Colour (post autoclaving/heating):	Whitish
	Clarity (post autoclaving/heating):	Opalescent
(III)Q.C. Test Microbiological		
	Cultural characteristics observed up to 5 days at 35-37°C.	

	MICROORGANISM (ATCC)	GROWTH			
	Azotobacter nigricans (35009)	Good-Luxuriant			
	Azotobacter vinelandii (478)	Good-Luxuriant			

Warning & Precautions :	1. For In vitro diagnostic Use.By professionals only.
	2. Read the label carefully before opening the container.Wear PPE wares.Follow established good microbiology laboratory practices while handling specimens and cultures and take standard precautions for handling specimens.
	3. For safety guidelines refer individual safety data sheet.
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:	Recommended for isolation of Azotobacter species from soil that can use mannitol and atmospheric nitrogen as source of carbon and nitrogen respectively.

Refer disclaimer Overleaf

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Storage:	Dehydrated medium-below 30°C Prepared medium- Between 20 to 30°C.				
Disposal:	Ensure safe disposal by autoclaving/or incineration of used or usable preparation of this product. Follow established laboratory procedures while disposing all infectious material and those coming in contact must be decontaminated and disposed off with existing laboratory technics.				
Packing:	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B932	40.7 g/l	12.28 L	7.4±0.2	Nil	121^{0}C/15 min.