B516	**ORCHID AGAR**
Formula	
Ingredients :	**gms/lit.**
Calcium nitrate	1.00
Monopotassium dihydrogen phosphate	0.25
Magnesium sulphate	0.25
Ammonium sulphate	0.50
Ferrous sulphate	0.025
Manganese sulphate	0.0075
Saccharose	20.00
Agar	15.00
Final pH (at 25°C) : 5.0 ± 0.2	
Directions :	
Suspend 37 gms. in 1000ml distilled water. Heat to boiling to dissolve the medium completely. Dispense and sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes.	
Principle :	
Orchid Agar was developed by Knudson for the germination of orchid seeds. In his research he found the importance of the presence of minor elements like copper, manganese and zinc for the growth of orchid seeds. Double or triple the amount of iron than manganese in the medium, is optimum for the orchid seed germination. Ammonium and magnesium sulphate in the medium help in germination of the orchid seeds. Saccharose (sucrose) is the carbohydrate source in the medium while monopotassium phosphate helps in maintaining the acidic pH of the medium by its buffering action.	
QC Tests – (I)Dehydrated Medium	
Colour :	Light yellow
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	5.0 ± 0.2
Colour (post autoclaving/heating) :	Light yellow
Clarity (post autoclaving/heating) :	Opalescent
(III)Q.C. Test Microbiological	
Satisfactory germination of orchid seeds was observed within a month.	
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 germination of orchid seeds.
Storage :	Dehydrated medium and prepared medium– Between 2 to 8°C.
Packing :	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B516	37.0 g/l	13.51 L	5.0 ± 0.2	Nil	121^{0}C/15 min.

Rev: December 2020