## BIOMARK Laboratories-INDIA www.biomarklabs.com TECHNICAL SHEET

B729 MIDDLEBROOK 7H10 AGAR BASE					
Formula					
Ingredients :	gms/lit.				
Ammonium sulphate	0.50				
L-Glutamic acid	0.50				
Monopotassium Phosphate	1.50				
Disodium phosphate	1.50				
Sodium citrate	0.40				
Ferric ammonium citrate	0.04				
Magnesium sulphate	0.025				
Calcium chloride	0.0005				
Zinc sulphate	0.001				
Copper sulphate	0.001				
Pyridoxine hydrochloride	0.001				
Biotin	0.0005				
Malachite green	0.00025				
Agar	15.00	15.00			
Final pH (at 25°C): 6.6 <u>+</u> 0.2					
Directions :					
Suspend 9.73 grams in 450 ml distilled	water containin	ng 2.5 ml glycerol. Heat to boiling to dissolve			
the medium completely. Sterilize at 15	blbs pressure (1	121°C) for 10 minutes. Cool to 45-50°C and			
aseptically add 50 ml Middlebrook OAD	C Growth Supple	ement (BF082). Mix well and pour into sterile			
screw capped tubes or containers.					
Note: Keep prepared medium in the da	irk before and a	fter inoculation.			
Principle :					
This medium consist of many inorganic	salts which help	p for the growth of Mycobacteria. Citric acid			
formed from sodium citrate helps in	retaining inorg	anic cations in solution. Glycerol supplies			
carbon and energy. Supplement OA	DC contains ol	eic acid, bovine albumin, sodium chloride,			
dextrose and catalase. Oleic acid and	other long chai	n fatty acids are essential for metabolism of			
Mycobacteria. Dextrose is an energy	source. Catalas	se neutralizes toxic peroxides while albumin			
protects tubercle bacilli from toxic ager	its. Malachite gi	reen partially inhibits other bacteria.			
QC Tests – (I)Dehydrated Medium					
Colour :	Cream to lig	Cream to light green			
Appearance :	Homogeneo	Homogeneous Free Flowing powder			
(II)Rehydrated medium					
pH (post autoclaving/heating) :	$6.6 \pm 0.2$	6.6 ± 0.2			
Colour (post autoclaving/heating) :	Very light a	Very light amber			
Clarity (post autoclaving/heating) :	Clear to slig	Clear to slightly opalescent gel with greenish tinge			
(III) O C Test Microbiological					
Citized the object of the obje					
and diversity after an inclubation at 35-37°C for 2-4 weeks					
Mycobactorium tuborculoric H37 DV (25618)		Sood luxuriant			
Mycobacterium amagmatia (14468)	(23016) G				
Mycobacterium fartuitum (6941)	G	Sood Invertent			
Prycobacterium fortuitum (6841)  GOOd-IUXUriant					
Precautions : 1. For Laboratory Use.					
2. Follow proper, established laboratory procedures in handling and disposing of					
infectious materials.					

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1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.					
2. Negative culture results do not rule out active infection by mycobacteria. Some					
factors that are responsible for unsuccessful cultures are ;					
<ul> <li>The specimen was not representative of the infectious material, i.e. saliva instead of sputum.</li> </ul>					
<ul> <li>The mycobacteria were destroyed during digestion and decontamination of the specimen.</li> </ul>					
Gross contamination interfered with the growth of the mycobacteria.					
Proper aerobic conditions and increased CO <sub>2</sub> tension were not provided during					
incubation.					
For isolation, cultivation and sensitivity testing of Mycobacterium tuberculosis .					
Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.					
500 gm. bottle					
Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization	
19.46 g/l	25.69L	6.6 ± 0.2	Middlebrook OADC Growth Supplement	121ºC / 10 minutes	
	<ol> <li>Since the encountered tha</li> <li>Negative cu factors that are         <ul> <li>The spannet instead</li> <li>The my specime</li> <li>Gross co</li> <li>Proper incubati</li> </ul> </li> <li>For isolation, cu Dehydrated me</li> <li>500 gm. bottle</li> <li>Reconstitution</li> <li>19.46 g/l</li> </ol>	<ol> <li>Since the nutritional requirem encountered that fail to grow or grow</li> <li>Negative culture results do not factors that are responsible for unsure instead of sputum.</li> <li>The specimen was not reprinstead of sputum.</li> <li>The mycobacteria were dest specimen.</li> <li>Gross contamination interfer</li> <li>Proper aerobic conditions an incubation.</li> <li>For isolation, cultivation and sensitiv Dehydrated medium- below 30°C Pre- 500 gm. bottle</li> <li>Reconstitution Quantity on Preparation (500g)</li> <li>19.46 g/l</li> </ol>	1. Since the nutritional requirements of orga         encountered that fail to grow or grow poorly on th         2. Negative culture results do not rule out activity         factors that are responsible for unsuccessful culture         • The specimen was not representative of instead of sputum.         • The mycobacteria were destroyed during specimen.         • Gross contamination interfered with the gr         • Proper aerobic conditions and increased of incubation.         For isolation, cultivation and sensitivity testing of N         Dehydrated medium- below 30°C Prepared medium         500 gm. bottle         Reconstitution         Quantity on         Preparation (500g)         19.46 g/l       25.69L	<ol> <li>Since the nutritional requirements of organisms vary, so encountered that fail to grow or grow poorly on this medium.</li> <li>Negative culture results do not rule out active infection by r factors that are responsible for unsuccessful cultures are ;         <ul> <li>The specimen was not representative of the infectious instead of sputum.</li> <li>The mycobacteria were destroyed during digestion and de specimen.</li> <li>Gross contamination interfered with the growth of the myco</li> <li>Proper aerobic conditions and increased CO<sub>2</sub> tension were incubation.</li> </ul> </li> <li>For isolation, cultivation and sensitivity testing of Mycobacterium tu Dehydrated medium- below 30°C Prepared medium- Between 2 to 500 gm. bottle</li> <li>Reconstitution</li> <li>19.46 g/l</li> <li>25.69L</li> <li>6.6 ± 0.2</li> <li>Middlebrook OADC Growth Supplement (BF082)</li> </ol>	

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