

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B499</b>	<b>DIFFERENTIAL REINFORCED CLOSTRIDIAL BROTH</b>					
<b>Formula</b>						
<b>Ingredients :</b>		<b>gms/lit.</b>				
Peptic digest of animal tissue		10.00				
Beef extract		10.00				
Yeast extract		1.50				
Starch		1.00				
Sodium acetate, hydrated		5.00				
Glucose		1.00				
L-cysteine hydrochloride		0.50				
Final pH (at 25°C) : 7.2 ± 0.2						
<b>Directions :</b>						
Suspend 29 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Just before use add 0.5 ml filter sterilized solution, prepared by mixing equal volumes of 4% w/v solution of sodium sulphite and 7% w/v ferric citrate, to 25 ml of single strength medium or 0.4 ml and 2 ml to 10 ml and 50 ml of double strength medium respectively. Mix well.						
<b>Principle :</b>						
Differentiation is based on the ability to reduce sulphite to sulphide to form iron sulphide result in black colour. Peptic digest of animal tissue, beef extract, yeast extract, starch, sodium acetate provide essential nutrients for bacterial metabolism. Glucose is the fermentable carbohydrate. L-cysteine hydrochloride acts as reducing agent.						
<b>QC Tests - (I) Dehydrated Medium</b>						
Colour :		Cream to yellow				
Appearance :		Homogeneous Free Flowing powder				
<b>(II) Rehydrated medium</b>						
PH (post autoclaving/heating) :		7.2 ± 0.2				
Colour (post autoclaving/heating) :		Light yellow to light amber				
Clarity (post autoclaving/heating) :		Clear				
<b>(III) Q.C. Test Microbiological</b>						
Cultural characteristics observed in an anaerobic atmosphere, with added 4% w/v solution of Sodium sulphite and 7% w/v Ferric citrate after an incubation at 30-35°C within 1 week.						
MICROORGANISM (ATCC )		GROWTH		H <sub>2</sub> S PRODUCTION		
Clostridium perfringens (13124)		Good to luxuriant		Positive reaction, blackening of medium		
Clostridium sporogenes (11437)		Good to luxuriant		Positive reaction, blackening of medium		
<b>Precautions :</b>		1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<b>Limitations :</b>		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
<b>Use :</b>		For the cultivation of Clostridia from water.				
<b>Storage :</b>		Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
<b>Packing :</b>		500 gm bottle				
<b>Product profile:</b>		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B499</b>		29 g/l	17.24L	7.2 ± 0.2	4% w/v solution of sodium sulphite and 7% w/v ferric citrate	121°C / 15 minutes