

**TECHNICAL SHEET**

<b>B938</b>	<b>BACILLUS CEREUS AGAR BASE</b>				
<b>Formula</b>					
<b>Ingredients:</b>		<b>gms/lit.</b>			
Peptone		1.00			
Mannitol		10.00			
Sodium chloride		2.00			
Magnesium sulphate		0.10			
Disodium phosphate		2.50			
Monopotassium phosphate		0.25			
Sodium pyruvate		10.00			
Bromo thymol blue		0.12			
Agar		15.00			
Final pH (at 25°C) : 7.2 ± 0.2					
<b>Directions :</b>					
Suspend 20.5 grams in 475 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of Polymyxin B Selective Supplement (BF005) and 25 ml of sterile Egg Yolk Emulsion (BF003). Mix well and pour into sterile Petri plates.					
<b>Principle :</b>					
Peptone provides and sodium pyruvate improve egg yolk precipitation and enhance sporulation. Bromothymol blue acts as pH indicator to detect mannitol fermentation. Addition of Polymyxin –B Sulphate at a final concentration of 100 units per ml of medium is sufficient to make the medium selective for the isolation of Bacillus cereus. If molds are suspected in the inoculum, 40 mcg per ml of filter-sterilized, Cycloheximide may be incorporated to suppress the mold contamination.					
<b>QC Tests – (I)Dehydrated Medium</b>					
Colour :		Greenish cream to greenish yellow			
Appearance :		Homogeneous Free Flowing powder			
<b>(II)Rehydrated medium</b>					
pH (post autoclaving/heating) :		7.2 ± 0.2			
Colour (post autoclaving/heating) :		A) Basal medium : Green B) (After addition of 5% egg yolk emulsion) : Yellowish green			
Clarity (post autoclaving/heating) :		A) Clear to slightly opalescent B) Opaque			
<b>(III)Q.C. Test Microbiological</b>					
Cultural characteristics observed with added Polymyxin B Selective Supplement (BF005) and Egg Yolk Emulsion (BF003) after an incubation at 35-37°C for 24-48 hours.					
MICROORGANISM (ATCC )		GROWTH	COLOUR OF COLONY	EGG YOLK REACTION	
Bacillus cereus (10876)		Good-luxuriant	Blue	Positive, precipitation	
Proteus vulgaris (13315)		Good-luxuriant	Green	Negative	
Staphylococcus aureus (25923)		Good-luxuriant	Yellow	Positive,clearing	
Serratia marcescens (8100)		Good-luxuriant	Yellow-light pink	Negative	
Escherichia coli (25922)		Inhibited	--	--	
<b>Precautions :</b>	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<b>Limitations :</b>	1. Some strains of Bacillus cereus may show poor growth due to nutritional variations. 2. Bacillus cereus and Bacillus thuringiensis shows identical characteristics and hence difficult to identify 3. Identification of Bacillus cereus is done by colony characteristics and reaction, however further biochemical characteristics should be should be carried out for confirmation.				
<b>Use:</b>	For selective isolation, detection and enumeration of Bacillus cereus.				
<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>B938</b>	40.97 g/l	12.204 L	7.2 ± 0.2	BF005 & BF003	121°C / 15 minutes