B1567	**NUTRIENT AGAR W/ TYROSINE**
Formula	
Ingredients :	**gms/lit.**
Meat Extract B#	3.00
Peptone	5.00
Agar	15.00
Tyrosine	5.00

Equivalent to beef extract.

Final pH (at 25°C):6.8± 0.2

Directions:

Suspend 28.00 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. Mix well and dispense 3.5 ml into sterile tubes with frequent mixing. Keep in slanted position and cool rapidly to prevent separation of tyrosine.

Principle:

B.cereus food poisoning may occur when foods are prepared and held without adequate refrigeration for several hours before serving, with B.cereus . Nutrient Agar w/ Tyrosine is used for cultivation and enumeration of Bacillus cereus in water and food in accordance with FDA BAM, 1998. The organism can be identified by its ability to hydrolyze tyrosine in the medium. Peptone and meat extract B provide essential nutrients for the growth of the organism. Agar acts as the solidifying agent. Tyrosine is a source of amino acid which is hydrolyzed by Bacillus species. Prepare 1:10 dilutions of 50 g of the sample in Butterfield's phosphate-buffered dilution water. Plate count of B.cereus can be done on MYP agar plates from appropriate dilutions. B.cereus gives pink coloured colonies on MYP agar. Suspected colonies are subcultured into Nutrient agar. Inoculate entire surface of tyrosine agar slant with mm loopful of culture from Nutrient agar. Incubate slants 48 h at 35°C. Positive results are indicated by the zone of clearance in and around the bacterial growth, indicating hydrolysis. Examine negative slants for obvious signs of growth, and incubate for a total of 7 days before considering as negative. This media is used in the confirmation of other species of Bacillus such as B. cereus, B. thuringiensis, B. mycoides, B. weihenstephanensis, B. anthracis and B. megaterium and also for Streptomyces and Nocardia species.

QC Tests – (I)Dehydrated Medium	
Colour:	Cream to yellow
Appearance:	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating):	6.8 ± 0.2
Colour (post autoclaving/heating):	Yellow
Clarity (post autoclaving/heating):	Clear to slightly opalescent gel

(III)Q.C. Test Microbiological

Cultural characteristics observed after an incubation at 35-37°C for 48hours up to 7days.

MICROORGANISM (ATCC)	GROWTH	TYROSINE HYDROLYSIS
Bacillus cereus (10876)	Good-Luxuriant	Positive reaction, clearing of medium in and around the bacterial growth.
Bacillus thuringiensis (10792)	Good-Luxuriant	Positive reaction, clearing of medium in and around the bacterial growth.
Escherichia coli (25922)	Good	Negative reaction, no clear zones

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 clinical specimens.
3. For safety guidelines refer individual safety data sheet.

Refer disclaimer Overleaf

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Limitations :	1. Further biochemical testing must be carried out for further identification.				
Use:	Recommended for cultivation and enumeration of Bacillus cereus in water and food in accordance with FDA BAM, 1998.				
Storage:	Dehydrated medium-below 30°C Prepared medium- Between 2 to 8°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
B1567	28.00 g/l	17.86 L	6.8 ± 0.2	Nil	121^0C /15 min.

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