

## Specification

Sterile selective supplement used for *Bacillus cereus* isolation and enumeration in food samples.

## Presentation

10 Freeze-dried vials  
Vial  
with:  $3 \pm 0.1$  g

### Packaging Details

$22 \pm 0.25 \times 55 \pm 0.5$  mm glass vials, tag labelled, White plastic cap - 10 vials per box.

### Shelf Life

49 months

### Storage

2-25 °C

## Composition

Composition (IU/vial)

Polymyxin B sulphate.....50.000 IU  
Excipient (sufficient amount)

**NOTE :** Each vial is sufficient to supplement 500 ml of *Bacillus cereus* agar base.

Reconstitute the original freeze-dried vial by adding

Sterile Distilled Water..... 6 ml

## Description /Technique

### Description:

This supplement is recommended for Bacillus Cereus Selective Agar, following PEMBA formulation and/or MYP one.

These media permit an easily and readily detection of a small number of *Bacillus Cereus* in a presence of a large number of food contaminants : *Bacillus cereus* grows in very typical colonies and it allows a rapid macroscopic identification.

PEMBA= blue colonies, surrounded by a clear zone of egg yolk

MYP= brilliant pink opaque colonies, with clear lecithinase halo

### Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with the sterile diluent in aseptic conditions and add it to 450 ml of melted Agar base cooled to 50°C, previously supplemented also with 50 ml of sterile Egg Emulsion. Do not overheat once supplemented.

Pour the complete medium into Petri dishes and, once solidified on a flat surface, spread the plates either by streaking or by spiral method.

Incubate the plates in aerobic atmosphere at  $30 \pm 1^\circ\text{C}$  for 24-48h.

Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample or the specifications.

After incubation, count all the colonies that have appeared onto the surface of the agar.

Presumptive isolation of *Bacillus cereus* must be confirmed by further microbiological and biochemical tests.

## Quality control

### Physical/Chemical control

Color : White-Gray

pH: at 25°C

### Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Distribute the complete medium, cooled at 50°C, in plates

Inoculate: Practical range  $100 \pm 20$  CFU. Min. 50 CFU (Productivity)/  $10^4$ - $10^6$  (Selectivity).

Aerobiosis. Incubation at  $35^\circ\text{C} \pm 2^\circ\text{C}$ , reading at 24-48 hours

### Microorganism

*Bacillus cereus* ATCC® 11778, WDCM 00001

*Escherichia coli* ATCC® 25922, WDCM 00013

### Sterility Control

Add 5 ml of the sample to:

100 ml TSB and 100 ml Thioglycollate.

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH.

### Growth

Good

Inhibited

**Bibliography**

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