ALLIANCE BIO EXPERTISE

Reference: DSHB3065 **A.B.E. - Technical Data Sheet**

Product: **Polymyxin B Selective Supplement**

Specification

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

Presentation

	Packaging Details	Shelf Life	Storage
10 Freeze dried vials Vial with: 3 ± 0.1 g	23x60 mm glass vials, tag labelled, White plastic cap - 10 vials per box.	49 months	2-25 ºC

Composition

Composition (IU/vial)

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

Reconstitute the original freeze-dried vial by adding
Sterile Distilled Water..... 6 ml

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

Description /Technique

Description:
This supplement is recomended for Bacillus Cereus Selective Agar, following PEMBA formulation and/or MYP one.
These media permit an easily and readly detectation 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 50ºC, previously supplemented also with 50-100 ml of sterile Egg Emulsion, according to ISO.
Do not overheat once suplemented.
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 30-37 ± 1ºC for 24-48h, according to ISO.
Incubation times longer than those mentioned above or different incubation temperatures may be requied 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

Microbiological control

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

Distribute the complete medium, cooled at 50ºC, in plates

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30 ± 1 ºC, read after 24 ±3h - 44 ±4h

Microbiological control according to ISO 11133:2014/A1:2018.

Microorganism	Growth
Bacillus cereus ATCC® 11778, WDCM 00001	Good
Escherichia coli ATCC® 25922, WDCM 00013	Inhibited
Bacillus subtilis ATCC® 6633, WDCM 00003	Yellow colonies without halous

Sterility control

Add 5mL of the sample to 100 mL of TSB and to 100 mL Thioglycollate.
Incubation 48 h at 30-35 ºC and 48 h at 20-25 ºC: NO GROWTH.
Check at 7 days after incubation in same conditions.

Bibliography

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