

Reference: DSHB3065

A.B.E. - Technical Data Sheet

Shelf Life

49 months

Storage

2-25°C

Product: Polymyxin B Selective Supplement

Specification

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

Presentation

Vial 22±0,25 x 55±0,5 mm glass vials, tag labelled, White with: $3 \pm 0.1 g$

plastic cap - 10 vials per box.

Packaging Details

Composition

Composition (IU/vial)

10 Freeze dried vials

Polymyxin B sulfate.....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 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 50°C, 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

Incubate the plates in aerobic atmosphere at 30-37 ± 1°C 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 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

Aerobiosis. Incubation at 30 ± 1°C, read after 24-48 h

Microorganism Growth

Bacillus cereus ATCC® 11778, WDCM 00001 Good Inhibited Escherichia coli ATCC® 25922, WDCM 00013

Sterility Control

Add 5ml of the sample to 100ml of TSB and to 100ml Thioglycollate Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH Check at 7 days after incubation in same conditions

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Bibliography

- · ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press. London.
- · CORRY, J.E.L., G.D.W. CURTIS & R.M. BAIRD. (2003) Handbook of Culture Media for Food Microbiology. Elsevier Sci. B.V. Amsterdam. The Netherlands.
- · DOWNES, F.P. & K. ITO (2001) Compendium of methods for the microbiological examination of foods. 4th ed. APHA. Washington DC. USA.
- · FIL-IDF 181:1998 Provisional Int. Standard. Dried Milk Products. Enumeration of Bacillus cereus.- Most probable number technique.
- · ISO 7932 Standard (2004) 3rd ed. Microbiology of food and animal feeding stuffs. Horizontal method for the enumeration of presumptive Bacillus cereus. Colony count technique at 30°C.
- . ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of
- · ISO 21871 Standard (2006) Microbiology of food and animal feeding stuffs.- Horizontal method for the determination of low numbers of presumptive Bacillus cereus.- Most probable number technique and detection method.
- · MOSSEL, D.A.A., KOOPMAN. M.J. & JONGERIUS, E. (1967) Enumeration of Bacillus cereus in foods. Appl. Microbiol. 15:650-653.
- · PASCUAL ANDERSON, Ma.Ra (1992) Microbiología Alimentaria. Díaz de Santos, S.A. Madrid.

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