

Specification

Isotonic diluent for the maximal recovery of stressed microorganisms according to ISO standards.

Presentation

10 Prepared bottles
Bottle 125 ml
with: 90 ± 3 ml

Packaging Details

1 box with 10 bottles 125 ml. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended.

Shelf Life

16 months

Storage

2-25 °C

Composition

Composition (g/l):

Peptone..... 1.00

Sodium chloride..... 8.50

Description /Technique

Description

This formulation combines the osmotic pressure of the physiological saline solution with the protective action of the peptone to obtain good recovery of stressed microorganisms.

The sodium chloride ensures isotonic conditions and the low concentration of peptone does not allow cellular growth in the short period (2-4 hours) of time required for the preparation of the dilution bank of the sample.

Technique

According to the ISO method, the sample is diluted in a ratio 1:10 with the Tryptone salt solution and homogenized by a vortex mixer or Stomacher®. After a short period (10-15 minutes) of rest, a 1/10 dilution bank with the same diluent is prepared following standard procedures. Plates are inoculated using the range of different concentrations.

Quality control

Physical/Chemical control

Color : Colourless

pH: 7.0 ± 0.2 at 25°C

Microbiological control

Prepare tubes / Inoculate ≤10³ CFU/ tube (productivity)/ subculture after holding at 20-25°C for 45 min. to 1 h.

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

Aerobiosis. Incubation at 30-35°C. Reading at 18-24/ 48 h

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

Microorganism

Escherichia coli ATCC® 8739, WDCM 00012

Staphylococcus aureus ATCC® 6538, WDCM 00032

Candida albicans ATCC® 10231, WDCM 00054

Ps. aeruginosa ATCC® 9027, WDCM 00026

Stph. aureus ATCC® 25923, WDCM 00034

Growth

Good. Recovery ±30% T0 (original enumeration)

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Sterility control

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

Check at 7 days after incubation in same conditions.

Bibliography

- ISO 6887-1: 1999 Microbiology of food and animal feeding stuffs. Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 1: General rules for the preparation of the initial suspension and decimal dilutions - Part 2 (2003): Specific rules for the preparation of meat and meat products.
- ISO 8261: 2001 Standard. Milk and milk products - General guidance for the preparation of test samples, initial suspension and decimal dilution for microbiological examination.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 16212 Standard (2017) Cosmetics - Microbiology - Enumeration of yeast and mould.
- ISO 21149 Standard (2017) Cosmetics - Microbiology - Enumeration and detection of aerobic mesophilic bacteria.
- ISO 21150 Standard (2015) Cosmetics - Microbiology - Detection of Escherichia coli.
- ISO 22717 Standard (2015) Cosmetics - Microbiology - Detection of Pseudomonas aeruginosa.
- ISO 22718 Standard (2015) . Cosmetics - Microbiology - Detection of Staphylococcus aureus.
- UNE-EN ISO 11133 (2014). Microbiología de los alimentos para consumo humano, alimentación animal y agua.-Preparación, producción, conservación y ensayos de rendimiento de los medios de cultivo.