

Specification

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

Presentation

3 Prepared Bags /3 L
Bags 3L
with: 3000 ± 10 ml

Packaging Details

1 box with 3 bags of 3L.
PVC plasticizer free sterile bag with: 1 vial stopper + 1 penetrable cap.
Dimensions: 23 x 32 cm. For use in food testing.

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 Maximum Recovery Diluent 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.

Inoculate according to final purpose, samples and validated methods.

Each Bag is intended for use with an automatic dispenser in laboratories requiring large volumes of broth media or diluent.

Discard any partially used bag to avoid contamination.

The bag has multiple connection points: 1 penetrable cap (injection port) latex-free polycarbonate, for any additive injection required. And an injection (vial stopper) to connect to any standard equipment laboratory dosing with a connector.

Once completely empty, the bag can be disposed of along with normal plastic (PVC).

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 on agar plates, 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

Candida albicans ATCC® 10231, WDCM 00054

Escherichia coli ATCC® 8739, WDCM 00012

Ps. aeruginosa ATCC® 9027, WDCM 00026

Staphylococcus aureus ATCC® 6538, WDCM 00032

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.
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- 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.