

Specification

Additive for use in microbiology.

Presentation

1 Prepared bottle
Bottles 125 ml
with: 100 ± 3 ml

Packaging Details

1 box with 1 amber bottle 125 ml
Injectable cap: Plastic screw inner cap + elastomer
septum + protective outer cap .

Shelf Life

12 months

Storage

4-12 °C

Composition

Composition (g/l):

0.2N NaOH..... 100 ml
Rosolic acid..... 1.00

Description /Technique

The alcohol solution rosolic acid 1% is indicated to supplement media base m-FC broth and / or agar.

Description:

FC Agar and Broth are formulated according to Geldreich et al., to detect the faecal coliforms in polluted water. The bile salts included in these media make these media selective for enterobacteria, and also selective for coliforms due to the high temperature of incubation: 44.5°C±0.5°C.

Freshly prepared medium has a red-garnet colour. Faecal coliform colonies are greenish-blue, and the medium also turns to this colour. In case of other bacteria, when they grow, show red colonies, and then the medium turns to red.

Technique:

Essentially, the technique consists of filtering the test sample to be examined through a membrane filter of suitable porosity (0.22-0.45 µm), assisting the filtration by pressure or suction, so that the microorganisms are retained on the membrane. Remove the membrane carefully and aseptically and take it to the culture medium. Put the membrane over the agar, if using the solid medium, or over the impregnated pad if using the liquid version. Cover the Petri plates and incubate them at 36±2°C for 18-24 hours. After incubation, proceed with the counting of coliforms. Should a total *E.coli* selectivity be desired, incubate at 44.5°C± 0,5.

Quality control

Physical/Chemical control

Color : Reddish

pH: at 25°C

Microbiological control

Add 10 ml to medium m-FC (Base)

Membrane Filtration /Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/10⁴-10⁶ CFU (selectivity)/ ≥10³ CFU (specificity).

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

Aerobiosis. Incubation at 44 °C ± 0,5. Reading at 24h ± 2h.

Microbiological control according to ISO 11133:2014/A1:2018; A2:2020.

Microorganism

Enterococcus faecalis ATCC® 19433, WDCM 00009
Escherichia coli ATCC® 8739, WDCM 00012
Escherichia coli ATCC® 25922, WDCM 00013
Escherichia coli ATCC® 11775, WDCM 00090
Escherichia coli ATCC® 25922, WDCM 00013 (37°C)

Growth

Inhibited
Good (≥ 50%) Blue colonie
Good (≥ 50%) Blue colonie
Good (≥ 50%) Blue colonie
Good (≥ 50%) Blue colonie

Sterility Control

Not applicable.

Reference: 355070ZF Technical Data Sheet

Product: **Rosolic Acid Solution 1%**

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Bibliography

- GELDREICH, E.E., H.F. CLARK, C.B. HUFF y L.C. BEST, (1965). Fecal-coliform-organism medium for the membrane filter technique. J. Am. Water Works Association (J.A.W.W.A.), 57:208-214.
- APHA-AWWA-WEF (1995) Standard Methods for the examination of water and wastewater. 19th ed. APHA. Washington.
- CLESCERI, L.S., A.E. GREENBERG y A.D. EATON., (1998). Standard Methods for the examination of Water and Wastewater. 20th ed. APHA . Washington.