

Specification

Solid medium for the confirmation and enumeration of enterococci in clinical samples and water samples by the membrane filtration method according to ISO 7899-2 and clinical samples.

Presentation

	Packaging Details	Shelf Life	Storage
30 Prepared plates 55 mm Plates for filtration purposes with: 9 ± 1 ml	1 box containing: 5 plastic bags with 6 plates of 55 mm/ bag.	6 months	2-25°C

Composition

Composition (g/l):

Tryptone.....	17.00
Peptone.....	3.00
Yeast extract.....	5.00
Bile.....	10.00
Sodium chloride.....	5.00
Esculin.....	1.00
Ammonium ferric citrate.....	0.50
Sodium azide.....	0.15
Agar.....	15.00

Description /Technique

Description:

Bile Esculin Azide Medium is a modification of the classical Bile Esculin proposed by Isenberg, Goldberg and Sampson in 1970, but with a reduction in the amount of bile and the addition of sodium azide. Brodsky and Schieman showed that this medium, also known as Pfizer Enterococci Selective Medium gave the best results using the membrane filtration technique.

The actual formulation according to the ISO Standard 7899-2:2000 is used for the second step in the confirmation and enumeration of enterococci in water by the membrane filtration method. The colonies previously selected in the Slanetz Bartley Agar must be confirmed by a short incubation on Bile Esculin Azide Medium for verification of esculin hydrolysis in a selective environment.

Technique:

After an incubation of 24-48 hours on Slanetz Bartley Agar, the membrane filter showing typical colonies is transferred, with sterile forceps in an upright position, to a pre-warmed plate of Bile Esculin Azide Agar. After two hours of incubation at $44 \pm 0.5^\circ\text{C}$ the membrane filter is inspected. All the typical colonies that show brown to black colour in the surrounding medium are considered positive and therefore intestinal enterococci.

A heterogeneous distribution of the colonies or the presence of abundant and different microorganisms can interfere with the differentiation of positive colonies.

Quality control

Physical/Chemical control

Color : Ochre yellow pH: 7.1 ± 0.1 at 25°C

Microbiological control

Incubate, MF w. microorganisms in SB at 37°C during 24-48 h and transfer in BEA medium.

Aerobic. Incubation at 44°C , for 2h . Esculine Test.

Microorganism

Enterococcus faecalis ATCC® 19433, WDCM 00009

Enterococcus faecalis ATCC® 29212, WDCM 00087

Enterococcus faecium ATCC® 6057, WDCM 00177

Escherichia coli ATCC® 25922, WDCM 00013

Stph. aureus ATCC® 25923, WDCM 00034

Growth

Good - Esculin Positive reaction

Good - Esculin Positive reaction

Good - Esculin Positive reaction

Inhibited

Inhibited

Sterility Control

Incubation 48 hours at $30-35^\circ\text{C}$ and 48 hours at $20-25^\circ\text{C}$: NO GROWTH

Check at 7 days after incubation in same conditions

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