Condalab

Reference: 4722 **Technical Data Sheet**

Product: FECAL COLIFORMS AGAR (m-FC)

Specification

Selective and differential medium for coliform enumeration by membrane filter technique.

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):

Tryptose	10.0
Yeast extract	3.0
Proteose peptone	5.0
Bile salts	4.5
Sodium chloride	5.0
Lactose	12.5
Aniline blue	0.1
Agar	15.0
Sol 1% Rosolic ac	10 ml

Description /Technique

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 porocity (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 : Red / Garnet pH: 7.4 ± 0.2 at 25°C

Microbiological control

Membrane Filtration /Practical range 100±20 CFU; Min. 50 CFU (Productivity)./10^4-10^6 CFU for Selectivity.

Aerobiosis. Incubation at 36 ± 2°C, reading at 18-24 h

Microorganism	Growth
Escherichia coli ATCC® 25922, WDCM 00013	Good (≥ 50%) Blue colonie
Enterococcus faecalis ATCC® 29212, WDCM 00087	Inhibited
Escherichia coli ATCC® 8739, WDCM 00012	Good (≥ 50%) Blue colonie
Salmonella typhimurium ATCC® 14028, WDCM 00031	Good - Red colonies

Sterility Control

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

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.
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