

Specification

Selective and differential medium used in the detection, isolation and enumeration of *Salmonella* and coliforms in clinical specimens according to the Pharmacopoeial Harmonized Methodology and in foodstuffs specimens according to ISO standard 21150.

Presentation

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

Composition

Composition (g/l):	
Pancreatic digest of gelatin.....	17.000
Peptone of meat.....	1.500
Peptone of casein.....	1.500
Lactose monohydrate.....	10.000
Bile salts.....	1.500
Sodium chloride.....	5.000
Neutral red.....	0.030
Crystal violet.....	0.001
Agar.....	13,5

Description /Technique

Collect, dilute and prepare samples and volumes to be filtered as required according to specifications, directives, official standard regulations and/or expected results.

Filter the sample through a 0.45 µm pore membrane and apply it onto the surface of the agar.

Incubate the plates right side up at 35+/-2°C for 24-48h.

After incubation, enumerate all the colonies that have appeared onto the surface of the filter.

Coliforms will develop reddish lactose-fermenting colonies. As violet crystal and ox bile inhibit gram-positive microorganisms, the growth of reddish colonies on plates incubated at 37°C will suggest total coliform presence in the sample; the growth of reddish colonies on plates incubated at 44°C will indicate faecal coliforms presence.

Calculate total microbial count per ml of sample by multiplying the average number of colonies per membrane by the inverse dilution factor. Report results as Colony Forming Unit (CFU's) per ml along with incubation time and temperature.

Each laboratory or industry must establish their own monitoring programme and evaluate its results according to their specifications.

Quality control**Physical/Chemical control**

Color : Pink

pH: 7.1 ± 0.2 at 25°C

Microbiological control

Growth Promotion Test 50-100 CFU according to harmonized Pharmacopoeia monographs (EP) and test methods & ISO 11133:2014/A1:2018

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

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

Aerobiosis. Incubation at 35 ± 2 °C, reading at 24-48 hours.

S. sonnei incubation at 37°C for 20-24h

Microorganism

Enterococcus faecalis ATCC® 19433, WDCM 00009

Staphylococcus aureus ATCC® 6538, WDCM 00032

Escherichia coli ATCC® 8739, WDCM 00012

Escherichia coli ATCC® 25922, WDCM 00013

Salmonella typhimurium ATCC® 14028, WDCM 00031

Ps. aeruginosa ATCC® 9027, WDCM 00026

Shigella sonnei ATCC® 9290

Growth

Inhibited

Inhibited

Good (≥ 50%) - Red purple colonies - Biliar precipitate

Good (≥ 50%) - Red purple colonies - Biliar precipitate

Good (≥ 50%) -colourless colonies w/o precipitate

Colourless colonies without biliar precipitate

Good -colourless colonies w/o precipitate

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.

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