

Specification

Medium for the detection and enumeration of coliforms in milk and other dairy products, according to APHA and ICMSF, FIL-IDF and ISO Standards.

Presentation

	Packaging Details	Shelf Life	Storage
20 Prepared Plates 90mm with: 21 ± 2 ml	1 box with 2 packs of 10 plates/pack. Single cellophane..	3 months	2-14 °C

Composition

Composition (g/l):	
Yeast extract.....	3.000
Peptone from meat.....	7.000
Bile salts mixture	1.500
Lactose.....	10.000
Sodium chloride.....	5.000
Neutral red.....	0.030
Crystal violet.....	0.002
Agar.....	13.000

Description /Technique

Description

The Violet Red Bile Agar corresponds to the classic formulation of standardized media for the screening of coliforms in milk and other dairy products. This medium has been adopted for the enumeration of coliforms as well as for differentiating between lactose-fermenting and non-lactose fermenting organisms, due to its contents of crystal violet and bile salts, whose inhibiting or selective properties have been widely confirmed.

Technique

For plate inoculation follow the laboratories standard methods or the applicable norms (spiral plating method, econometric methods, streak plating, dilution banks, spread plating with drigralsky rod etc ...)

The plates are read after 24 hours of incubation at 30°C.

The size of the colonies ranges from 2 to 5 mm, depending on the amount per plate. If enterococci develop they will appear small in size and pink coloured. Lactose fermenting enterobacteria acquire a dark red colour with a clearing zone around them, while lactose non-fermenting ones form colourless colonies.

Quality control

Physical/Chemical control

Color : Violet-pink pH: 7.4 ± 0.2 at 25°C

Microbiological control

Inoculate: Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/ 10⁴-10⁶ (selectivity).

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

Aerobiosis. Incubation at 30 ± 1 °C during 25 ± 1 h.

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

Microorganism

Enterococcus faecalis ATCC® 19433, WDCM 00009
Ps. aeruginosa ATCC® 9027, WDCM 00026
Salmonella typhimurium ATCC® 14028, WDCM 00031
Escherichia coli ATCC® 8739, WDCM 00012
Escherichia coli ATCC® 25922, WDCM 00013

Growth

Inhibited
 Colourless to beige colonies
 Colourless to beige colonies
 Good (≥50%)- Red purple colonies
 Good (≥50%)- Red purple colonies

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

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