

Specification

Chromogenic medium for isolation of *Salmonella* spp. according to ISO 6579.

Presentation

	Packaging Details	Shelf Life	Storage
20 Prepared plates 90 mm 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 + Peptone.....	8.000
Salts.....	8.500
Chromogenic Mix.....	1.300
Selective supplement.....	6.000
White opaque supplement.....	1.000
Cefsulodin sodium salt.....	0.005
Agar.....	15.00

Description /Technique

Description

Chromogenic medium for the isolation of *Salmonella* species including *S. Typhi* and lactose positive *Salmonella*.

This medium has a very high sensitivity but some *Salmonella* Dublin may appear colourless, nevertheless *Salmonella* Dublin is a rarely encountered serovar.

Some *E.coli* strains may develop a very slight mauve colouration.

Some *Pseudomonas* may have similar mauve colony aspect and can be eliminated by an oxydase test.

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 drigalsky rod etc ...)

If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.

Streak sample onto plate and incubate at 37±1°C for 18-24 hours.

The interpretation of the results is:

E.coli: colourless colonies

Coliforms: blue colonies

Salmonella: mauve colonies

P.hauseri: colourless or inhibited.

Ps. aeruginosa: Inhibited.

Final identification must be done by biochemistry and serology.

Quality control

Physical/Chemical control

Color : Off-white pH: 7.6 ± 0.2 at 25°C

Microbiological control

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

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

Aerobiosis. Incubation at 37 ± 1 °C, reading after 24 ± 3 h

Microorganism

Salmonella enterica ATCC® 13076, WDCM 00030

Salmonella typhimurium ATCC® 14028, WDCM 00031

Escherichia coli ATCC® 25922, WDCM 00013

Citrobacter freundii ATCC® 8090

Ps. aeruginosa ATCC® 9027, WDCM 00026

Growth

Good - mauve colonies

Good - mauve colonies

Good - Colourless colonies

Good -Blue colonies

Inhibited

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

- PERRY, J.D., FORD, M., TAYLOR, J., JONES, A.L., FREEMAN R., GOULD, F.K. (1999). ABC medium a new chromogenic agar for the selectie isolation of *Salmonella* sp. J. Clin. Microbiology.
- COOKE, V.M., MILES, R.J, PRICE, R.G., RICHARDSON,A.C., (1999): A novel chromogenic ester agar medium for detection of *Salmonella*, Appl. Environ. Microbiology 65, 807-812.
- RAMBACH, A. (1990). Appl. Environ, Microbiol.56, 301-303.
- ISO Standard 6579-1 (2017) Microbiology of food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1 : Detection of *Salmonella* spp.
- . ISO 11133(2014). Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.