

Reference: 5249

Technical Data Sheet

Specification

Liquid culture medium used for the growth of host-bacteria in the enumeration of somatic coliphages in samples of any type of water, sediment and sludge, according to ISO 10705-2: 2000

Presentation

10 Prepared bottles Bottle 125 ml with: 25 ± 0.5 ml

Packaging Details

Shelf Life

12 months

Storage 8-25 ºC

1 box with 10 bottles 125 ml. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not

recommended.

Composition

Composition (g/l):	
Tryptone	10.0
Yeast extract	
Meat extract	12.0
Sodium chloride	3.00
Magnessium chloride(Anhy.)	0.60
Sodium carbonate	

Description / Technique

The Scholten's Modified broth is described in ISO 10705-2: 2000 Water Quality. Detection and enumeration of bacteriophages. Part 2: Count of somatic coliphages. It is used as a culture medium for the basal layer of the plates for the counting of bacteriophages. For details about the technique and the procedure, the technician is referred to the aforementioned regulations.

Quality control

Physical/Chemical control

Color: vellow pH: 7.2 ± 0.5 at 25°C

Microbiological control

Inoculate:Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity). Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020

Aerobiosis. Incubation at 35 ± 2 °C. Reading at 24 hours.

Microorganism

Escherichia coli ATCC® 43888 Escherichia coli ATCC® 700078 (WG5) Escherichia coli ATCC® 13706

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

- · GRABOW W.O.K. & P. COUBOROUGH (1986) Practical direct plaque assay for coliphages in 100 ml samples of drinking water. Appl. Environ. Microbiol. 52:430-433.
- · HAVELAAR, A.H. & W.M. HOGEBOOM (1983) Factors affecting the enumeration of coliphages in sewage and in sewage-polluted waters. Antonie van Leeuwenhoek 49:387-397.
- · KENNEDY, J.E., G. BITTON & J.L. OBLINGER (1985) Comparison of Selective Media for Assay of Coliphages in Sewage Effluent and Lake Water. Appl. Environ. Microbiol. 49:1:33-36.
- · MUNIESA, M. y J. JOFRE (1998) Abundance in Sewage of Bacteriophages That Infect Escherichia coli 0157:H7 and That Carry the Shiga Toxin 2 Gene. Appl. Environ. Microbiol. 64:7:2443-24.

Growth

Good

Good

Good

· UNE-EN ISO Standard 10705-2:2001 Calidad del agua. Detección y recuento de bacteriófagos. Parte 2: Recuento de colifagos somáticos. International Standardization Organization. Geneva. Switzerland.

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