

Specification

Semisolid 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

1 Prepared bottles
Bottle 125 ml
with: 100 ± 3 ml

Packaging Details

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.

Shelf Life

12 months

Storage

8-25 °C

Composition

Composition (g/l):

Tryptone.....	10.0
Yeast extract.....	3.00
Meat extract.....	12.0
Sodium chloride.....	3.00
Magnesium chloride(Anhy.).....	0.60
Sodium carbonate.....	0.75
Agar.....	7.50

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 growth culture medium for the production and maintenance of the host-bacteria for the counting of bacteriophages. For details about the technique and the procedure, the technician is referred to the aforementioned regulations.

The base medium is melted and cooled to a temperature between 45-50°C. Add the calcium chloride solution under aseptic conditions. Mix carefully and distribute into plates.

Note: The solid mediums can be melted in different ways: autoclave, bath and, if the customer considers appropriate, also the microwave. Whenever the microwave option is chosen, it is necessary to take certain safety measures to avoid breaking of the containers, such as loosening the screw cap and putting the bottle or tube in a water bath in the microwave. The fusion temperature and time will depend on the shape of the container, the volume of medium and the heat source. Avoid overheating as both the heating periods.

Quality control

Physical/Chemical control

Color : yellow 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

Growth

Good

Good

Good

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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