

Specification

Selective medium for the study of Legionellaceae formulated according to ISO 11731

Presentation

20 Prepared Plates
90 mm
with: 22 ± 2 ml

Packaging Details

1 box with 2 packs of 10 plates/pack. Single cellophane.

Shelf Life

3 months

Storage

2-14°C

Composition

Composition (g/l):

| | |
|---------------------------|------|
| Activated charcoal..... | 2.00 |
| Yeast extract..... | 10.0 |
| Aces buffer..... | 10.0 |
| Potassium hydroxide..... | 2.80 |
| Alfa-ketoglutarate..... | 1.00 |
| Ferric pyrophosphate..... | 0.25 |
| Agar..... | 15.0 |

Description /Technique

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

This medium is also well suited for air environmental sampling (total compatibility with commercially available air samplers).

Spread the plates by streaking methodology or by spiral method.

Incubate the plates right side up at 36+/-2°C for up to 5-10 days in a chamber/jar with high humidity.

(Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,...)

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

Colonies are usually visible after 3 to 4 days of incubation. They have a mucous, glossy, white-grey appearance and measure 2 to 3 mm in diameter.

Legionella will not grow on media which have no cysteine enrichment.

Microscopic examination shows Legionella to be extremely polymorphic with short, rod shaped forms and long filaments.

They are Gram (-), oxidase and catalase weak positive.

A total identification should be carried out using immunological and chromatographic techniques.

Each laboratory must evaluate the results according to their specifications, comparatively with the results obtained using a medium with addition of cysteine.

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

Quality control

Physical/Chemical control

Color : Black

pH: 6.8 ± 0.2 at 25°C

Microbiological control

Spiral Spreading: Practical range 100±20 CFU; Min. 50 CFU (Productivity) / 10⁴-10⁶ CFU (Selectivity).

Microbiological control according to ISO 11133:2014/ Adm 1:2018.

Aerobiosis. Incubation at 36 ± 2 °C. Reading 3 - 5 days.

Microorganism

Leaionella pneumophila ATCC® 33152, WDCM 00107

Escherichia coli ATCC® 25922, WDCM 00013

Growth

Inhibited

Good

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

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