



AATCC Bacteriostasis Agar

Intended Use:

Recommended for the detection of antibacterial activity of fabrics.

Composition**

| Ingredients | Gms / Litre |
|------------------------------|-------------|
| Peptone | 10.000 |
| HM peptone B # | 5.000 |
| Sodium chloride | 5.000 |
| Agar | 15.000 |
| Final pH (at 25°C) | 7.2±0.2 |
| # Equivalent to Beef extract | |

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 35 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates

Principle And Interpretation

AATCC Bacteriostasis Agar is used in accordance with the standard procedure (3,4,5). It may be used to carry stock cultures of *Escherichia coli* and *Staphylococcus aureus*. Also, it is used for the detection of antibacterial activity of fabrics.

Peptone and HM peptone B are sources of carbon, nitrogen, vitamins and minerals. Sodium chloride provides essential ions. The test cultures of *Escherichia coli* and *Staphylococcus aureus* are grown in AATCC Bacteriostasis Broth (M221) for 24 hours. 1 ml of this culture is mixed with 150 ml of AATCC Bacteriostasis Agar and poured into the plate. After the agar solidifies, apply a circular sterile test fabric of 28.6 mm diameter onto the plate. Incubate at 35°C for 18-24 hours and observe the inhibition of growth around test fabric.

Type of specimen

Textile samples - Fabrics

Specimen Collection and Handling:

Hqnqy "crrtqrtkvg" yej pks wgu"hqt" j cpfnkpi "ur geko gpu"cu"r gt "guvcdnkuj gf" i wkf gnkpgu"cpf "nqecn'uvcpf ctfu Chygt "wug. "eqpvco kpcygf "o cygtkcnu"o wuv"dg"uvgtknk gf"d{ "cwqencxkpi "dghqtg"f kuectf kpi 0

Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical testing is required for complete identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance Cream to yellow homogeneous free flowing powder Gelling

Firm, comparable with 1.5% Agar gel

M231

Colour and Clarity of prepared medium

Amber coloured clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 7.2±0.2

pН

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

| Organism | Inoculum (CFU) | Growth | Recovery |
|--|-------------------|----------------|----------|
| Escherichia coli ATCC 25922 (00013*) | 50-100 | good-luxuriant | >=70% |
| Pseudomonas aeruginosa ATCC 27853 (00025*) | 50-100 | good-luxuriant | >=70% |
| Salmonella Typhi ATCC 6539 | 50-100 | good-luxuriant | >=70% |
| Staphylococcus aureus subsp. aureus ATCC 6538 (00032*) | 50-100 | good-luxuriant | >=70% |

Key: *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

- 1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 3. Ruuhle and Brewer, 1931, USFDA Methods of Testing Antiseptics and Disinfectants, USDA Circ.: 198.
- 4. Tech. Manual of AATCC, 1985, Vol. 61, AATCC, Research Triangle Park, N.C.

5. Williams (Ed.), 1995, Official methods of Analysis of AOAC, 16th ed. AOAC, Washington D.C.

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Disclaimer :

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