Fluid Lactose Medium w/ Neutralizing & dispersing Agents M2196I

Intended Use

Recommended for detection of *Escherichia coli* from cosmetic products. The composition and performance criteria are in accordance with ISO 21150:2015(E).

Composition**

ISO 21150:2015(E)- Fluid Lactose Medium w/ Neutralizing & dispersing Agents

Ingredients	g / L
Pancreatic digest of gelatin	5.000
Beef extract	3.000
Lactose	5.000
Egg Lecithin	1.000
Polysorbate 80	5.000
Octoxynol 9	1.000
Final pH (at 25°C)	6.9±0.2

M2196I- Fluid Lactose Medium w/ Neutralizing & dispersing Agents

Ingredients	g / L
Gelatin Peptone$	5.000
HM peptone B#	3.000
Lactose	5.000
Egg Lecithin	1.000
Polysorbate 80	5.000
Octoxynol 9	1.000
Final pH (at 25°C)	6.9±0.2

**Formula adjusted, standardized to suit performance parameters

- Equivalent to Beef extract $ -Equivalent to Pancreatic digest of gelatin

Directions

Suspend 20.00 grams in 1000 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Neutralizing fluid is used to neutralize the activity of antimicrobial agents. Fluid Lactose Medium w/ Neutralizing & dispersing Agents is recommended by ISO Committee (1).The neutralizing agents present in the medium neutralizes the activity of antimicrobial agents.

Gelatin Peptone and HM peptone B provides carbon, nitrogen compounds, vitamins, minerals and other essential growth nutrients. Egg lecithin and polysorbate 80 act as neutralizing agents. Octoxynol 9 acts as a surfactant.

Type of specimen

Cosmetic samples.

Specimen Collection and Handling

For cosmetics samples follow appropriate techniques for handling specimens as per established guidelines (2,3).

After use, contaminated materials must be sterilized by autoclaving before discarding.

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. Biochemical characterization is necessary to be performed on colonies from pure cultures for further 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

Colour and Clarity of prepared medium

Colourless to pale yellow opalescent solution in tubes

Reaction

Reaction of 2.0% w/v aqueous solution at 25°C. pH : 6.9±0.2

pH

6.70-7.10

Cultural Response

Cultural characteristics observed when subcultured on Tryptone Soya Agar (M290), after an incubation at 35-37°C for 40-48 hours.

Organism	Inoculum (CFU)	Growth
***Bacillus spizizenii* ATCC 6633 (00003*)	50-100	good
Escherichia coli ATCC 8739 (00012*)	50-100	good
Staphylococcus aureus subsp. *aureus* ATCC 25923 (00034*)	50-100	good
Staphylococcus aureus subsp. *aureus* ATCC 6538 (00032*)	50-100	good
Escherichia coli ATCC 25922 (00013*)	50-100	good

Key : (*) Corresponding WDCM numbers **Formerly known as *Bacillus subtilis* subsp. *spizizenii*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°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 (2,3).

Reference

1. Cosmetics - Microbiology - Detection of *Escherichia coli* International Organization for Standardization ISO 21150:2015
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. 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.

Revision:00/2025