Soyabean Casein Digest Mediumw/ LTHTh

M1973

Intended Use:

Recommended for determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics.

Composition**

Ingredients	Gms / Litre
Tryptone	15.000
Soya peptone	5.000
Sodium chloride	5.000
Lecithin	0.700
Polysorbate 80 (Tween 80)	5.000
Histidine	0.500
Sodium thiosulphate	0.500
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 31.7 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Soyabean Casein Digest Medium w/ LTHTh is used for the detection and enumeration of microorganisms for products of sanitary importance, water miscible cosmetics, Products containing antimicrobials or preservatives (1)

Soya peptone and Tryptone provide nitrogenous compounds and other nutrients essential for microbial replication. Lecithin, polysorbate 80 (Tween 80) and thiosulphate act as neutralizing agents reported to neutralize the activity of antimicrobial agents. Lecithin and polysorbate 80 neutralizes quaternary ammonium compounds and parahydroxy benzoates. Sodium thiosulphate neutralizes mercurial, halogens, aldehydes etc. Histidine acts as a reducing agent.

Collection of samples from areas before and after the treatment with disinfectant evaluates cleaning procedures in environmental sanitation. The presence and number of microorganisms is determined by the appearance of colonies on the agar surface (2).

Type of specimen

Sanitary products, water miscible cosmetics.

Specimen Collection and Handling:

For sanitary products, water miscible cosmetics follow appropriate techniques for handling specimens as per established guidelines. (1)

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.This medium is general purpose medium and may not support the growth of fastidious organisms.

2. Further biochemical and serological tests must be carried out for further identification.

3. Some organism may show poor growth due to nutritional variation.

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
Light yellow to yellow coloured, clear solution in tubes

Reaction
Reaction of 3.17% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH
7.10-7.50

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

Organism	Growth	Growth w/ disinfectant
Escherichia coli ATCC 25922 (00013*)	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)
Pseudomonas aeruginosa ATCC 27853 (00025*)	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)
Staphylococcus aureus subsp.aureus ATCC 25923 (00034*)	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store dehydrated and the prepared medium at 2-8°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. Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.
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.
4. Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.

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