



## Soyabean Casein Digest Medium w/ LTHTh

M1973

This medium is used for determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics, etc. It can also be used to enumerate the organisms from water insoluble products and fatty products containing preservatives or antimicrobials.

### Composition\*\*

Ingredients	Gms / Litre
Casein enzymic hydrolysate	15.000
Papaic digest of soyabean meal	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 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)

Casein enzymic hydrolysate and papaic digest of soyabean meal 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).

### 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.

#### Cultural Response

Organism	Growth	Growth w/ disinfectant
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#### Cultural Response

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<i>Escherichia coli</i> ATCC 25922	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)
<i>Pseudomonas aeruginosa</i> ATCC 27853	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)
<i>Staphylococcus aureus</i> ATCC 25923	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)

### Storage and Shelf Life

Store below 30°C in tightly closed container and prepared medium at 2-8 °C. Use before expiry date on label.

### Reference

- 1.Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.
- 2.Murray PR, Baron, Pfaller, and Tenover (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.

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