

Bases / Media Supplements

Technical Information

Soyabean Casein Digest Agar w/ LTHTh

Product Code: DM 2691

Application: - Soyabean Casein Digest Agar w/ LTHTh is recommended 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		
Agar	15.000		
Final pH (at 25°C)	7.3±0.2		
**Formula adjusted, standardized to suit performance parameters			

Principle & Interpretation

Soyabean Casein Digest Agar 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).

Methodology

Suspend 46.7 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

Light to medium amber coloured, clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 4.67% w/v aqueous solution at 25°C. pH : 7.3±0.2





Dehydrated Culture Media Bases / Media Supplements

pH Range

7.10-7.50

Cultural Response

DM 2691: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism	Growth	Growth w/ Disinfectant
Escherichia coli ATCC 25922	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)
Pseudomonas aeruginosa ATCC 27853	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)
Staphylococcus aureus ATCC 25923	luxuriant	fair-good, (depends on concentration of quarternary ammonium compounds)

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and prepared medium at 2-8 °C. Use before expiry date on label. **Prepared Media**: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.

2. Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C.

Disclaimer:

• User must ensure suitability of the product(s) in their application prior to use.

• The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at CDH is true and accurate

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