

# **Technical Information**

## Fluid Casein Digest Soya Lecithin Medium (Twin Pack)

### Product Code: DM1117

Application: - Fluid Casein Digest Soya Lecithin Medium is recommended for sanitary examination of surfaces.

Composition**		
Ingredients	Gms / Litre	
Part A	-	
Casein enzymic hydrolysate	20.000	
Soya lecithin	5.000	
Part B	-	
Polysorbate 20	40.000	
Final pH ( at 25°C)	7.3±0.2	
**Formula adjusted, standardized to suit performance p	arameters	

### Principle & Interpretation

Fluid Casein Digest Soya Lecithin Medium is recommended by USP for use in Microbial Limit Tests<sup>(1)</sup> and by the Indian Pharmacopeia<sup>(2)</sup> for sanitary examination of surfaces. Weber and Black had described the importance of a highly nutritional medium containing neutralizing agents for neutralizing quaternary ammonium compounds<sup>(3, 4)</sup> there by recommended by NASA for the microbiological sampling of environmental surfaces sanitized with quaternary ammonium compounds<sup>(5)</sup>. It is also used for microbiological examination of food products, nutritional and dietary supplements.

The medium contains casein enzymic hydrolysate, which provides necessary nutrients for the growth of the organisms. Soya lecithin neutralizes the quaternary ammonium compounds while polysorbate 20 neutralizes phenolic disinfectants, hexachlorophene and formalin <sup>(6)</sup>.

### Methodology

Suspend 25 grams of Part A media in 960 ml distilled water. Shake well & heat to dissolve the medium completely. Add 40 ml of Part B media. Mix well and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and dispense as desired.

### **Quality Control**

#### Physical Appearance

Part A :Cream to yellow homogeneous free flowing powder Part B : Colourless clear viscous liquid

#### Colour and Clarity of prepared medium

Yellow coloured, clear solution without any precipitate

#### Reaction

Reaction of the medium (2.5% w/v Part A + 4.0% w/v Part B) at 25°C. pH : 7.3±0.2

pH range 7.10-7.50

#### Cultural Response/ characteristices

DM 1117: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours (for fungal species incubate at 25-30°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth
Candida albi cans ATCC 10231	50-100	good-luxuriant
Bacillus subtilis ATCC 6633	50-100	good-luxuriant
Escherichia coli ATCC 25922	50-100	good-luxuriant





Dehydrated Culture Media Bases / Media Supplements

Staphylococcus aureus ATCC 25923	50-100	good-luxuriant
Escherichia coli NCTC 9002	50-100	good-luxuriant
Escherichia coli ATCC 8739	50-100	good-luxuriant
Staphylococcus aureus ATCC 6538	50-100	good-luxuriant

### Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label. Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

### **Further Reading**

1. The United States Pharmacopeia, 2009, The United States Pharmacopeial Convention. Rockville, MD.

2. Indian pharmacopoeia, 1997, Govt. of India, Ministry of Health and Family Welfare, Vol. II, Controller of Publications, New Delhi.

- 3. Weber and Black, 1948, Soap and Sanitary Chemicals, 24:134.
- 4. Weber and Black, 1948, Am. J. Public Health, 38:1405.

5. National Aeronautics and Space Administration, 1966, Standard Procedures for the Microbiological Examination of Space Hardware. 6. Favero (chm.), 1967, Microbiological Sampling of Surfaces, Biological Contamination Control Committee, American Asso. for Contamination Control.

### **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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