



Technical Data

HiEncap™ Soyabean Casein Digest Medium (HiEncap™ Tryptone Soya Broth)

EC011D

HiEncap™ Soyabean Casein Digest Medium (HiEncap™ Tryptone Soya Broth) is a general purpose medium used for cultivation of a wide variety of microorganisms and recommended for sterility testing of moulds and lower bacteria.

Composition**

Ingredients	Gms / Litre
Pancreatic digest of casein	17.000
Papaic digest of soyabean meal	3.000
Sodium chloride	5.000
Dextrose	2.500
Dibasic potassium phosphate	2.500
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Each capsule contains 15 grams of media. Suspend 1 capsule in 500 ml (2 capsules in 1000 ml) purified or distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and dispense as desired.

Note: If any fibres are observed in the solution, it is recommended to filter the solution by using a 0.22 micron filter to eliminate the possibility of presence of fibres.

Principle And Interpretation

Soyabean Casein Digest Medium is recommended by various pharmacopeias as a sterility testing and as a microbial limit testing medium (1, 2, 3). This medium is a highly nutritious medium used for cultivation of a wide variety of organisms (4).

The combination of pancreatic digest of casein and papaic digest of soyabean meal makes the medium nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Dextrose and dibasic potassium phosphate serve as the carbohydrate source and the buffer, respectively in the medium. Sodium chloride maintains the osmotic balance of the medium.

Quality Control

Appearance

Gelatin capsule containing cream to yellow coloured granulated media

Colour and Clarity of prepared medium

Light yellow coloured clear solution without any precipitate.

Quantity

Each capsule contains 15 grams of medium sufficient for 500 ml media

Reaction

pH of 3.0% 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 30-35°C for ≤ 3 days for Bacteria and at 20-25°C for ≤ 5 days for fungi

Cultural Response

Organism	Growth	Incubation period	Inoculum (CFU)	Incubation temperature
Growth promoting				
<i>Escherichia coli</i> ATCC 8739	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Escherichia coli</i> ATCC 25922	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Staphylococcus aureus</i> ATCC 6538	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Staphylococcus aureus</i> ATCC 25923	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Candida albicans</i> ATCC 2091	luxuriant	<=5 d	50 -100	30 -35 °C
<i>Streptococcus pneumoniae</i> ATCC 6305	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Pseudomonas aeruginosa</i> ATCC 27853	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Salmonella</i> Typhimurium ATCC 14028	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Salmonella</i> Abony NCTC 6017	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Bacillus subtilis</i> ATCC 6633	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Micrococcus luteus</i> ATCC 9341	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Escherichia coli</i> NCTC 9002	luxuriant	18 -24 hrs	50 -100	30 -35 °C
<i>Pseudomonas aeruginosa</i> ATCC 9027	luxuriant	18 -24 hrs	50 -100	30 -35 °C
Sterility Testing- Growth promotion+ Validation				
<i>Micrococcus luteus</i> ATCC 9341	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Salmonella</i> Abony NCTC 6017	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Candida albicans</i> ATCC 10231	luxuriant	<=5 d	50 -100	30 -35 °C
* <i>Aspergillus brasiliensis</i> ATCC 16404	luxuriant	<=5 d	50 -100	30 -35 °C
<i>Escherichia coli</i> ATCC 8739	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Escherichia coli</i> ATCC 25922	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Escherichia coli</i> NCTC 9002	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Bacillus subtilis</i> ATCC 6633	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Salmonella</i> Typhimurium ATCC 14028	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Streptococcus pneumoniae</i> ATCC 6305	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Staphylococcus aureus</i> ATCC 6538	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Staphylococcus aureus</i> ATCC 25923	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Pseudomonas aeruginosa</i> ATCC 9027	luxuriant	<=3 d	50 -100	20 -25 °C
<i>Pseudomonas aeruginosa</i> ATCC 27853	luxuriant	<=3 d	50 -100	20 -25 °C

* Key: Formerly known as *Aspergillus niger*

Storage and Shelf Life

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

Reference

1. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, M.d.
2. The United States Pharmacopeia, 2008, USP31/NF26, The United States Pharmacopeial Convention, Rockville, MD.
3. Indian Pharmacopeia, 2007, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.
4. Forbes B. A., Sahm D. F. and Weissfeld A. S., 1998, Bailey & Scotts Diagnostic Microbiology, 10th Ed., Mosby, Inc. St. Louis, Mo.

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