Technical Data

Soyabean Casein Digest Agar

SMH290CCL

for the subculture of aerobic organisms in accordance with the hamonized method USP/EP/BP/JP/IP.

Composition**

Ingredients	Gms / Litre
Pancreatic digest of casein	15.000
Papaic digest of soyabean meal	5.000
Sodium chloride	5.000
Agar	15.000

**Formula adjusted, standardized to suit performance parameters

Directions

Soyabean Casein Digest Agar is a ready to use solid media in glass bottle. The medium is pre-sterilized; hence it does not need sterilization. Medium in the bottle can be melted either by using a pre-heated water bath or any other method. Slightly loosen the cap before melting. When complete melting of medium is observed dispense the medium as desired and allowed to solidify.

Principle And Interpretation

Soyabean Casein Digest Agar is a widely used medium, which supports the growth of wide variety of organisms even that of fastidious ones such as *Neisseria*, *Listeria* , and *Brucella* etc. The medium with addition of blood provides perfectly defined haemolysis zones, while preventing the lysis of erythrocytes due to its sodium chloride content. It has been frequently used in the health industry to produce antigens, toxins etc. Its simple and inhibitor-free composition makes it suitable for the detection of antimicrobial agents in the food and other products. Tryptone Soya Agar is recommended by various pharmacopoeias as sterility testing medium (1, 2).

Tryptone Soya Agar conforms as per USP (1) and is used in microbial limit test and antimicrobial preservative - effective test. Gunn et al (3) used this medium for the growth of fastidious organisms and study of haemolytic reaction after addition of 5% v/v blood. The combination of Pancreatic digest of casein and papaic digest of soyabean meal makes this media nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Sodium chloride maintains the osmotic balance.

Soyabean Casein Digest Agar does not contains X and V growth factors. It can be conveniently used in determining the requirements of these growth factors by isolates of Haemophilus by the addition of X-factor (DD020), V-factor (DD021), and X+V factor discs (DD022) factor to inoculated TSA plates (4).

Quality Control

Appearance
Sterile glass bottle containing slightly opalescent Soyabean Casein Digest Agar.

Colour
Light yellow coloured medium

Quantity of Medium
250 ml

Reaction
7.10- 7.50

Sterility Test
Passes release criteria.

Cultural Response
Growth Promotion was carried out and growth was observed after an incubation as specified. (*- Formerly known as Aspergillus niger) Recovery rate is considered 100% for bacteria growth on Blood Agar and fungus growth on Sabouraud Dextrose Agar.

Organism	Growth	Inoculum (CFU)	Observed Lot value	Recovery (CFU)	Incubation temperature	Incubation period
Bacillus subtilis ATCC 6633	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Staphylococcus aureus ATCC 25923	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Staphylococcus aureus ATCC 6538	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Escherichia coli ATCC 25922	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Escherichia coli ATCC 8739	luxuriant	50 -100	35 -100	>=70 %		18 -24 hrs
Escherichia coli NCTC 9002	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Pseudomonas aeruginosa ATCC 27853	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Pseudomonas aeruginosa ATCC 9027	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Micrococcus luteus ATCC 9341	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Streptococcus pneumoniae ATCC 6305	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Salmonella Typhimurium ATCC 14028	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs
Candida albicans ATCC 10231	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	<=5 d
Candida albicans ATCC 2091	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	<=5 d
Aspergillus brasiliensis ATCC 16404	Good-luxuriant	25 -70	50 -100	50 -70 %	30 -35 °C	<=5 d
Aspergillus brasiliensis ATCC 16404	Luxuriant	50 -100	35 -100	>=70 %	20 -25 °C	<=5 d
Salmonella Abony NCTC 6017	luxuriant	50 -100	35 -100	>=70 %	30 -35 °C	18 -24 hrs

Reference

1. The United States Pharmacopoeia / National Formulary, 2008, USP 31 The United States Pharmacopoeial Convention Inc., Rockville, MD. 2. Indian Pharmacopoeia, 2007, Govt. of India, Ministry of Health and Family Welfare, New Delhi, India. 3. Gunn B. A., Ohashi D K., Gaydos C. A., Holt E. S., 1977, J. Clin. Microbiol., 5(6) : 650. 4. Forbes B. A., Sahm A. S. and Weissfeld D. F., 1998, Bailey and Scotts Diagnostic Microbiology, 10th Ed., Mosby Inc. St. Louis, Mo

Storage and Shelf Life

Store between 15-25°C. Use before expiry date on the label.

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