Soyabean Casein Digest Medium (Tryptone Soya Broth)

Intended Use
Soybean Casein Digest Medium is a general-purpose medium used for the isolation and cultivation of a wide variety of fastidious and non-fastidious microorganisms.

Summary
Soyabean Casein Digest Medium (SCDM) is widely used for the cultivation of microorganisms from environmental sources, supporting the growth of a wide variety of microorganisms including common aerobic, facultative and anaerobic bacteria and fungi. It is also used for preparing dilutions of organisms for colony counts and preparation of standard inocula for disc diffusion and dilution antimicrobial susceptibility testing as standardized by the National Committee for Clinical Laboratory Standards (NCCLS). This medium is used in sterility testing for the detection of contamination with low incidence fungi and aerobic bacteria and in the performance of microbial limit test. It is used in the coliphage detection procedure, a Methodology in Standard Methods for the Examination of Water and Wastewater. Soyabean Casein Digest Agar and Medium are included in the Bacteriological Analytical Manual for food and cosmetics testing, in the Compendia of Methods for the examination of milk, water and wastewater and foods.

Principle
The combination of Tryptone and soya peptone makes the medium nutritious by providing nitrogenous, carbonaceous substances, amino acids and long chain peptides for the growth of microorganisms. Dextrose serves as the carbohydrate source and dipotassium phosphate buffers the medium. Sodium chloride maintains the osmotic balance of the medium.

Formula*

Ingredients	**g/L**
Tryptone	17.0
Soya Peptone	3.0
Sodium Chloride	5.0
Dextrose	2.5
Dipotassium Phosphate	2.5
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30ºC in tightly closed container and the prepared medium at 2ºC-8ºC. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen
Water and Wastewater samples; Pharmaceutical samples; Food and Dairy samples.

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 30.00 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Light yellow to amber coloured, clear solution without any precipitate.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 30°C-35°C for ≤ 3 days for bacteria and ≤ 5 days for fungi.
Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time, inoculating ≤ 100 cfu (at 30°C-35°C for ≤ 3 days for bacteria and ≤ 5 days for fungi).

Organism (ATCC)	Growth	Incubation Temperature
Staphylococcus aureus subsp. *aureus* (6538)	Good	30°C - 35°C
Pseudomonas aeruginosa (9027)	Good	30°C - 35°C
Bacillus spizizenii (6633)	Good	30°C - 35°C
Candida albicans 3147 (10231)	Good	30°C - 35°C
Aspergillus brasiliensis WLRI 034(120) (16404)	Good	30°C - 35°C
Candida albicans 3147 (10231)	Good	20°C - 25°C
Bacillus spizizenii (6633)	Good	20°C - 25°C
Aspergillus brasiliensis WLRI 034(120) (16404)	Good	20°C - 25°C

Note: Inoculum cfu for good growth is 10 - 100.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:
1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. The United States Pharmacopoeia, 2018, The United States Pharmacopoeial Convention Inc., Rockville, MD.
2. British Pharmacopoeia, 2011, The Stationery office British Pharmacopoeia
3. European Pharmacopoeia, 2011, European Dept. for the quality of Medicines.
4. Japanese Pharmacopoeia, 2008.
5. Gunn. B. A. et al, 1977, J. Clin. Microbiol., 5(6): 650
6. The Indian Pharmacopoeia 2010, Govt of India, Ministry of Health and Family Welfare, New Delhi.
7. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201190250100	Dehydrated Culture Media	100 g
201190250500	Dehydrated Culture Media	500 g
201190252500	Dehydrated Culture Media	2.5 k
201190255000	Dehydrated Culture Media	5 k
203190600010	Ready Prepared Tube	25 x 10 mL
203190600020	Ready Prepared Tube	10 x 20 mL
203190600090	Ready Prepared Tube	10 x 90 mL
203190600250	Ready Prepared Tube	6 x 250 mL
203190600100	Bottle Media (Screw Cap)	100 mL
203190600200	Bottle Media (Screw Cap)	200 mL
203190600300	Bottle Media (Screw Cap)	300 mL
203190600500	Bottle Media (Screw Cap)	500 mL
203190730100	Bottle Media (Canister)	100 mL
203190730200	Bottle Media (Canister)	200 mL

203190740100	Bottle Media (Screw Cap + Septa)	100 mL
203190750100	Bottle Media (Wide Mouth Bottle)	100 mL