

## Soyabean Casein Digest Medium (Tryptone Soy Broth)

### Intended Use

Recommended as a general-purpose medium used for cultivation of a wide variety of microorganisms and recommended for sterility testing of moulds and lower bacteria.

### Typical Composition (g/litre)

Tryptone 17.0; peptone from soymeal 3.0; D (+) glucose monohydrate 2.5; sodium chloride 5.0; di-potassium hydrogen phosphate 2.5

### Mode of Action

Soyabean Casein Digest Medium is recommended by various pharmacopeia as a sterility testing and as a microbial limit-testing medium.

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/glucose serves as the carbohydrate source and dibasic potassium phosphate buffer the medium. Sodium chloride maintains the osmotic balance of the medium.

### Preparation

Suspend 30 g/litre, autoclave (15 min at 121 °C).

pH: 7.3 ± 0.2 at 25 °C

### Storage

Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation. Product performance is best if used within stated expiry period

### Specimen

Pharmaceutical samples, Clinical samples.

### Experimental Procedure and Evaluation

Depend on the purpose for which the media are used. Incubation: 24 hours at 35 °C aerobically, for up to 7 days for the sterility-test at room temperature.



## Quality Control

Organism	Inoculum	Incubation Temp	Incubation Period
Salmonella Typhimurium ATCC 14028	50 - 100	30 - 35°C	18 - 12 hrs
Salmonella Abony NCTC 6017	50 - 100	30 - 35°C	18 - 12 hrs
Pseudomonas aeruginosa ATCC 9027	50 - 100	30 - 35°C	18 - 12 hrs
Streptococcus pneumoniae ATCC 6305	50 - 100	30 - 35°C	18 - 12 hrs
Staphylococcus aureus ATCC 6538	50 - 100	30 - 35°C	18 - 12 hrs
Escherichia coli ATCC 25922	50 - 100	30 - 35°C	18 - 12 hrs
Escherichia coli ATCC 8739	50 - 100	30 - 35°C	18 - 12 hrs
Bacillus subtilis ATCC 6633	50 - 100	30 - 35°C	18 - 12 hrs
Micrococcus luteus ATCC 9341	50 - 100	30 - 35°C	18 - 12 hrs
Pseudomonas aeruginosa ATCC 27853	50 - 100	30 - 35°C	18 - 12 hrs
Candida albicans ATCC 10231	50 - 100	30 - 35°C	18 - 12 hrs
Staphylococcus aureus ATCC 25923	50 - 100	30 - 35°C	18 - 12 hrs
Aspergillus brasiliensis ATCC 16404	50 - 100	20 - 25°C	<=5 d

## Reference

1. Forbes B. A., Sahm D. F. and Weissfeld A. S., 1998, Bailey & Scotts Diagnostic Microbiology, 10th Ed., Mosby, Inc. St. Louis, Mo
2. The United States Pharmacopeia, 2019, The United States Pharmacopeial Convention, Rockville, MD.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock. D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, M.d.