

# **Technical Information**

# Soyabean Casein Digest Medium w/o Dextrose (Tryptone Soya Broth w/o Dextrose)

Product Code: DM 1322

**Application:** Tryptone Broth is used for the detection of indole production by coliforms.

Composition\*\*

Ingredients	Gms / Litre	
Casein enzymic hydrolysate	17.000	
Papaic digest of soyabean meal	3.000	
Sodium chloride	5.000	
Dibasic potassium phosphate	2.500	
Final pH ( at 25°C)	7.3±0.2	
**Formula adjusted, standardized to suit performance	parameters	

## Principle & Interpretation

Soyabean Casein Digest Medium is recommended by various pharmacopoeias as a sterility testing and microbial limit testing medium <sup>(1-3)</sup>. This medium is a highly nutritious and used for cultivation of a wide variety of organisms <sup>(4)</sup>.

Soyabean Casein Digest Medium w/o Dextrose (DM1322) is a modification of Soyabean Casein Digest Medium and is used as a base for preparation of more complex media for the cultivation of pathoganic organisms like *Neisseria*, Streptococci etc. With the addition of carbohydrates it can be also used for the fermentation studies of fastidious and non-fastidious organisms. This medium is used for the cultivation of wide variety of microorganisms when the presence of carbohydrate is undesirable. Casein enzymic hydrolysate and papaic digest of soyabean meal supplies nitrogenous and carbonaceous compounds, trace minerals etc. Sodium chloride maintains osmotic balance while dibasic potassium phosphate provides buffering capacity. The carbohydrate concentration used most frequently in fermentation reactions is 0.5% or 1%.

# Methodology

Suspend 27.5 grams of powder media in 1000 ml distilled water. Shake well & heat if necessary to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

# **Quality Control**

#### Physical Appearance

Cream to yellow homogeneous free flowing powder

#### Colour and Clarity of prepared medium

Light yellow coloured clear solution without any precipitate

#### Reaction

Reaction of 2.75% w/v aqueous solution at 25°C. pH: 7.3±0.2

**pH Range:-** 7.10-7.50

#### Cultural Response/Characteristics

DM 1322: Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 48 hours

Organism	Inoculum CFU)	Growth
Bacteroides fragilis ATCC 25285	50-100	good-luxuriant
Clostridium perfringens ATCC 12924	50-100	good-luxuriant
Neisseria meningitidis ATCC 13090	50-100	good
Staphylococcus epidermidis ATCC 12228	50-100	good-luxuriant
Streptococcus pneumoniae ATCC 6303	50-100	good-luxuriant
Streptococcus pyogenes ATCC 19615	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. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, M.d.
- 2. The United States Pharmacopoeia, 2008, USP3 1/NF26, The United States Pharmacopoeial Convention, Rockville, MD. 3.Indian Pharmacopoeia, 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.

### 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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