

## Tryptone Soy Broth (NCM0019)

### Intended Use

Tryptone Soy Broth (TSB) is a general-purpose broth which will support the growth of a wide range of micro-organisms and is not intended for use in the diagnosis of disease or other conditions in humans.

### Description

Tryptic Soy Broth, a general purpose medium, is commonly referred to as Casein Soya Bean or Soybean-Casein Digest Broth, and abbreviated as TSB. This medium was originally developed for use without blood in determining the effectiveness of sulfonamides against pneumococci and other organisms. Clostridia and non-sporulating anaerobes grow luxuriantly in this broth when incubated under anaerobic conditions. TSB is recommended for testing bacterial contaminants in cosmetics and complies with established standards in the food industry.

Enzymatic Digest of Casein and Enzymatic Digest of Soybean Meal are nitrogen sources in TSB. Dextrose is the carbon energy source that facilitates organism growth. Sodium Chloride maintains osmotic balance; Dipotassium Phosphate is a buffering agent.

For Casein Soya Bean Digest Broth QC tested according to the USP/EP/JP methodology and requirements, please use NCM0004.

### Formula / Liter

Enzymatic Digest of Casein	17.0 g/L
Enzymatic Digest of Soybean	3.0 g/L
Sodium Chloride	5.0 g/L
Dipotassium Hydrogen Phosphate	2.5 g/L
Glucose Monohydrate	2.5 g/L
Final pH: 7.3 ± 0.2 at 25°C	

Formula may be adjusted and/or supplemented as required to meet performance specifications.

### Precaution

Refer to SDS

### Preparation

1. Dissolve 30 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.

### Test Procedure

Refer to appropriate references for specific procedures using Tryptone Soy Broth.

### Quality Control Specifications

**Dehydrated Appearance:** Powder is homogeneous, free flowing, and light beige.

**Prepared Appearance:** Prepared medium is brilliant to clear, yellow to amber, with none to light precipitate.

# Technical Specification Sheet



**Expected Cultural Response:** Cultural response in Tryptic Soy Broth.

Microorganism	Approx. Inoculum (CFU)	Incubation Period	Expected Growth
<i>Aspergillus brasiliensis</i> ATCC® 16404	10 – 100	Within 5 days	Growth
<i>Bacillus subtilis</i> ATCC® 6633	10 – 100	18 – 72 hours	Growth
<i>Candida albicans</i> ATCC® 10231	10 – 100	18 – 72 hours	Growth
<i>Escherichia coli</i> ATCC® 8739	10 – 100	18 – 24 hours	Growth
<i>Pseudomonas aeruginosa</i> ATCC® 9027	10 – 100	18 – 24 hours	Growth
<i>Staphylococcus aureus</i> ATCC® 6538	10 – 100	18 – 24 hours	Growth

The organisms listed are the minimum that should be used for quality control testing.

## **Results**

Refer to appropriate references for test results. Growth is indicated by turbidity.

## **Expiration**

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original pale to light beige. Expiry applies to medium in its intact container when stored as directed.

## **Limitation of the Procedure**

Due to nutritional variation, some strains may grow poorly or fail to grow on this medium.

