

# TRYPTIC SOY BROTH

- For in vitro use only -

Catalogue No. BT85

Tryptic Soy Broth is a general-purpose medium used for the cultivation of a variety of fastidious and non-fastidious microorganisms.

Tryptic Soy Broth was initially developed for sensitivity testing of pneumococci to sulfonamides. Our standard formulation is prepared according to the United States Pharmacopeia (USP) and is recommended for numerous applications by several regulatory bodies including the Association of Official Analytical Chemists (AOAC), the United States Department of Agriculture (USDA), the American Public Health Association (APHA), and the Canadian Food Inspection Agency (CFIA).

Tryptic Soy Broth is a highly nutritious medium used for the cultivation of aerobes and facultative anaerobes, and some fungi. The nutritive components include pancreatic digest of casein and papaic digest of soybean meal. Dextrose is a carbohydrate that acts as a carbon, energy source. Sodium chloride provides an isotonic environment for bacteria while dipotassium phosphate helps to maintain a stable pH.

# Formulation per Litre of Medium

Pancreatic Digest of Casein 1	7.0	g
Papaic Digest of Soybean Meal	3.0	g
Sodium Chloride	5.0	g
Dextrose	2.5	2
Dipotassium Phosphate	2.5	g

pH  $7.3 \pm 0.2$ 

#### **Recommended Procedure**

(Please refer to appropriate literature for a more detailed procedure)

1. Allow medium to adjust to room temperature prior to inoculation.

- 2. Aseptically, lightly inoculate the broth with the test sample.
- 3. Incubate aerobically with caps loosened at 35°C.
- 4. Examine after 24 hours. Re-incubate broth an additional 24 hours if required. An extended incubation period of 7 days may be required if TSB is being used for culturing fungi.

### **Interpretation of Results**

After the incubation period, the broth should appear turbid, an indication of organism growth. If desired, the broth can be sub-cultured onto a solid medium to better characterize isolates and to observe colonial morphology.

# **Quality Control**

After checking for correct pH, colour, depth, and sterility, the following organisms are used to determine the growth performance of the completed medium.

Organism	<b>Expected Result</b>
Escherichia coli ATCC 25922	Growth (Turbid)
Streptococcus aureus ATCC 25923	Growth (Turbid)

#### **Storage and Shelf Life**

Our Tryptic Soy Broth should be stored away from direct light at 4°C to 8°C in an upright position. Under these conditions the mediums have a 26-week shelf life from the date of manufacture.

#### References

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