



Tryptic Soy Broth, TSB | AS-1371

A general-purpose medium used in qualitative procedures for the cultivation of fastidious and non-fastidious microorganisms.

Tryptic Soy Broth (TSB) is a complex liquid medium that is non-selective and is commonly used in microbiological quality control.

Peptones provide the main source of carbon and nitrogen, dextrose for the metabolism of carbohydrates, and dibasic potassium phosphate as a buffer, TSB offers a well-balanced nutritional condition for the growth of a variety of microorganisms. Sodium chloride maintains the medium equilibrium.

Pharmacopoeias and international standards for microbial enumeration and sterility testing accept TSB as a standard medium.

Composition (gr/L)

Pancreatic digest of Casein	15
Papaic digest of Soybean Meal	5
Sodium Chloride	5
Dipotassium Hydrogen Phosphate	2.5
Dextrose	2.5
Final pH at 25°C	7.3 ± 0.2

Preparation

Dissolve 30 g of the powder into 1 liter distilled water. Autoclave at 121 °C for 15 minutes.

Quality Control

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Prepared Appearance: Light amber, clear.

Reaction of 3.0% Solution at 25°C: pH 7.3 ± 0.2

Microbial Test Results

Incubate at 30 to 35 °C for 18 to 72 hours.

Organism (ATCC)	Recovery
<i>Escherichia coli</i> (8739)	Good
<i>Bacillus subtilis</i> (6633)	Good
<i>Streptococcus pneumoniae</i> (6305)	Good
<i>Candida albicans</i> (10231)	Good
<i>Pseudomonas aeruginosa</i> (9027)	Good

Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.