

Tryptic Soy Broth (TSB) with SPS (i23607)

For preparation of blood culture and cultivating fastidious microorganisms.

Industry: Clinical

Principles & Uses

Tryptic Soy Broth with SPS is a nutrient-rich medium supporting the robust growth of fastidious organisms in microbiological laboratories. Used in various diagnostic and research procedures, it facilitates the isolation, sensitivity testing, and production of antigens for a range of pathogens. Essential components include peptones for nitrogen, dextrose as a carbohydrate source, and sodium chloride for electrolytes and osmotic balance. The addition of sodium polyanetholesulfonate (SPS) serves as an anticoagulant in blood culture media, enhancing the recovery of most microorganisms while inhibiting specific strains like *Peptostreptococcus anaerobius* and *Neisseria* species.

Composition (gr/L)

Pancreatic digest of Casein 15 g, Papaic digest of Soybean Meal 5 g, Sodium Chloride 5 g, Dipotassium Hydrogen Phosphate 2.5 g, Dextrose 2.5 g, SPS 0.3 g. Final pH at 25°C 7.3 ± 0.2

Preparation from dehydrated Powder

Suspend 30.3 g of the medium in one liter of purified water. Mix thoroughly. Autoclave at 121°C for 15 minutes.

Quality Control

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

Prepared Appearance: Light amber, clear.

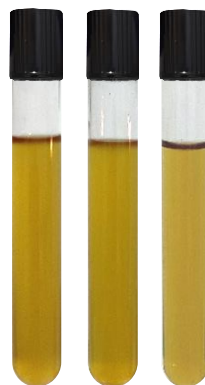
Reaction of 3.03% Solution at 25°C: pH 7.3 ± 0.2

Cultural Response

Cultural response was observed after 18 - 48 hours of incubation at 35 - 37°C.

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

*ATCC is a registered trade mark of the American Type Culture Collection.



Candida albicans (left). *Escherichia coli* (middle). Prepared Culture Medium (right).

Storage

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