

Trypticasein Soy Broth (TSB) With Tween 80

Cat. 2157

For the determination of sanitization efficiency

Practical information

Applications	Categories
Detection	General use

Industry: Environmental monitoring

Principles and uses

Trypticasein Soy Broth (TSB) with Tween 80 is used for determining efficiency of disinfection of containers, surfaces, water cosmetics, etc and other products of sanitary importance. It can also be utilized for the detection and enumeration of microorganisms from water insoluble products and fatty products containing preservatives or antimicrobials.

Containing two peptones as rich nitrogen sources, obtained by the enzymatic hydrolysis of Casein and Soy proteins, this medium supports the growth of a great variety of microorganisms, including fastidious aerobes and anaerobes. Besides nitrogen, peptones also provide vitamins, minerals and amino acids essential for microbial growth. Dextrose is the fermentable carbohydrate providing carbon and energy. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Dipotassium phosphate acts as a buffer system. Tween 80 and soya lecithin neutralize quaternary ammonium compounds and parahydroxy benzoates.

Formula in g/L

Dextrose	2,5	Dipotassium phosphate	2,5
Pancreatic digest of casein	17	Papainic digest of soy bean	3
Sodium chloride	5	Tween 80	5
Soy lecithin	0,7		

Preparation

Suspend 35,7 grams of the medium in one liter of distilled water. Mix well. Heat slightly until complete dissolution of the medium is achieved. Dispense in the appropriate containers and sterilize in autoclave at 121 °C for 15 minutes.

Instructions for use

- Samples should be collected from test areas before and after the treatment with disinfectant in order to evaluate cleaning procedures in environmental sanitation.
- Inoculate the sample and incubate at a temperature of 30-35 °C for 18-24 hours.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Light beige	Amber, slightly opalescent	7,3 ± 0,2

Microbiological test

Incubation conditions: (30-35 °C / 18-24 h)

Inoculation conditions: (50-100 CFU)

Microorganisms	Specification

Escherichia coli ATCC 25922	Good growth
Staphylococcus aureus ATCC 25923	Good growth
Pseudomonas aeruginosa ATCC 27853	Good growth
Staphylococcus aureus ATCC 6538	Good growth
Escherichia coli ATCC 8739	Good growth
Pseudomonas aeruginosa ATCC 9027	Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:8 °C

Bibliography

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