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## TECHNICAL INFORMATION

Catalog Number: 1010617  
**Tryptic Soy Agar**

**Description:** For the isolation and cultivation of fastidious organisms. Trypticasein soy agar is a medium very rich in nutrients for "general use" in microbiological laboratories. It supports the abundant growth of fastidious organisms such as pneumococci, streptococci, neisserias, etc. it is very useful for determination of hemolytic reactions.

Approximate formula in g/l:			
Casein Peptone	15	Soy Peptone	5
Sodium Chloride	5	Agar	15
Final pH 7.3 $\pm$ 0.2			

### Preparation:

Suspend 40 g of the medium in one liter of deionized or distilled water. Heat with frequent agitation and boil for one minute. Sterilize in an autoclave between 118 and 121°C at a pressure of no more than 15 lbs. for 15 minutes. In the case of large volume preparation, increase the time of sterilization but not the temperature or pressure. Cool and pour into Petri dishes. For hemolytic studies, add 5 to 10% sheep or rabbit blood.

### Uses:

Containing two peptones obtained by enzymatic hydrolysis of casein and soy protein, this medium supports the growth of a great variety of microorganisms, including fastidious aerobes and anaerobes. Since it lacks carbohydrates it is very useful in the study of hemolytic reactions and also in the preparation of chocolate agar. If desired, antibiotics can easily be incorporated as well as other supplements or inhibitory agents. A short list of microorganisms that grow on this medium are the following: Streptococcus, Neisseria, Brucella, Corynebacterium, Listeria, Pasteurella, Vibrio, Haemophilus vaginalis, Candida, etc.

### Physical and Chemical Test:

Appearance	fine powder	Solubility	w/ o rest
Color	yellow	pH	7.3

### Microbiological Test:

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37 °C and observed after 24 hours.

<u>Microorganisms</u>	<u>Growth</u>	<u>Growth with 5% sheep's blood</u>	<u>Hemolysis</u>
Neisseria meningitidis ATCC 13090	Good	Good	- - -
Staphylococcus aureus ATCC 25923	Good	Good	beta
Staphylococcus epidermidis ATCC 12228	Good	Good	- - -
Streptococcus pneumoniae ATCC 6303	Good	Good	alfa
Streptococcus pyogenes ATCC 19615	Good	Good	beta

The pH after preparing the medium and at room temperature: 7.3  $\pm$  0.2

### Bibliography:

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- Hentges, A., *J.Clin.Path.*, **38**, 304 (1962)
- Kereluk and Gunderson, *Applied Microbiol.*, **22**, 299 (1959)