

Trypticase(Tryptic) Soy Broth(TSB)

Catalog : HBKP4114-10

Trypticase(Tryptic) Soy Broth(TSB), also referred to as Soybean Casein Digest Medium (SCDM) in USP, is a general purpose medium used in qualitative procedures for the cultivation of fastidious and non-fastidious microorganisms from a variety of clinical and nonclinical specimens.

Approximate Formula:

Ingredients	gm/liter
Pancreatic Digest of Casein	17.0
Papaic Digest of Soybean	3.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	2.5
Glucose	2.5
Final pH 7.3±0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions for dehydrated medium:

Suspend 30.0g of the medium in one liter of distilled water or deionized water. Mix well and heat with frequent agitation. Dispense into triangle flasks. Sterilize in an autoclave at 121°C (15 lbs.) for 15 minutes.

Principle and Interpretation:

Pancreatic digest of casein and Papaic digest of soybean provide amino acids and other complex nitrogenous substances. Glucose is an energy source. Sodium chloride maintains the osmotic equilibrium. Dipotassium hydrogen phosphate acts as a buffer to control pH.

Appearance:

Dehydrated medium is a free-flowing yellowish granule. The prepared medium is a kind of yellowish liquid.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Trypticase(Tryptic) Soy Broth(TSB) must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 35±1°C for 18-24 hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Remarks
<i>Escherichia coli</i>	ATCC 25922	10-100	luxuriant	Turbid
<i>Staphylococcus aureus</i>	ATCC 6538	10-100	luxuriant	Turbid
<i>Bacillus subtilis</i>	ATCC 6633	10-100	luxuriant	Turbid
<i>Pseudomonas aeruginosa</i>	ATCC 9027	10-100	luxuriant	Turbid
<i>Candida albicans</i>	ATCC 10231	10-100	luxuriant	Turbid(culture for 48-72h)
<i>Aspergillus niger</i>	ATCC 16404	10-100	luxuriant	Produce hyphae(culture for 48-72h)

References:

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national formulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.