Tryptic Soy Broth (Harmonized) RDM-H-TSB-01

Principle

Tryptic Soy Broth (Harmonized) is composed of tryptone, soy peptone, dextrose, sodium chloride and dipotassium phosphate. Tryptone and soy peptone provide nitrogen and other essential nutrients. Dextrose is a carbon source, serves as energy source for optimum growth. Sodium chloride maintains osmotic balance, while di-potassium phosphate is a buffering agent. It is general purpose medium used for cultivation of fastidious and non-fastidious organisms. It is also recommended by USP, IP, JP and EP for sterility testing and as medium for microbial limit testing of pharmaceutical products and raw material used in pharmaceutical industries.

Use: Recommended for cultivation of wide variety of microorganism.

Contents*

Ingredients	**Gram/Litre**
Tryptone#	17.000
Soy peptone##	3.000
Dextrose	2.500
Sodium chloride	5.000
Dipotassium Hydrogen Phosphate	2.500
pH at 25˚C	7.3 ±0.2

* Formula adjusted for optimum performance and parameters
# Pancreatic Digest of Casein ## Papaic Digest of Soybean

Directions: Dissolve 30.00 grams in 1000 ml distilled water; boil to dissolve the medium completely and distribute aseptically. Sterilize by autoclaving at 15 lbs. pressure (121 °C) for 15 min, cool it to 42-45 °C and inoculate test sample aseptically.

Specimens types analyzed

Pharmaceutical samples, clinical and non-clinical samples etc.

Precautions to be taken

All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Light beige colored free flowing, homogeneous hygroscopic powder.
Reaction of 3.0% solution	7.3 ±0.2 at 25˚C
pH	7.10- 7.50
Color and clarity of ready medium	Light amber colored clear solution.

Growth Promotion properties	Best at ≤ 100 CFU at 32-37 ºC for 18-72 h.
Indicative properties	Optimum at ≤ 100 CFU at 32-37 ºC for 18-48 h.
Negative control	Performed using sterile distilled water.

Different Microbial Response: Prepare media as per the label directions. Inoculate and incubate at 30-35°C for 18-24 hours for bacteria and 20-25°C for 3-5 days for yeast and mold.

Organism	ATCC	Inoculum (CFU)	Growth
Escherichia coli	8739	50-100	Luxuriant
Escherichia coli	25922	50-100	Luxuriant
Staphylococcus aureus	6538	50-100	Luxuriant
Staphylococcus aureus	25923	50-100	Luxuriant
Salmonella typhimurium	14028	50-100	Luxuriant
Pseudomonas aeruginosa	9027	50-100	Luxuriant
Pseudomonas aeruginosa	27853	50-100	Luxuriant
Bacillus spizizenii	6633	50-100	Luxuriant
Lactobacillus plantarum	8014	50-100	Luxuriant
Saccharomyces cerevisiae	9763	50-100	Luxuriant
Candida albicans	10231	50-100	Luxuriant
Aspergillus brasiliensis	16404	50-100	Luxuriant

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label.
Note: Sterilize media immediately after reconstitution.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

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5. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), Standard methods for the examination of water and wastewater. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.
6. The Japanese Pharmacopoeia, 17th Ed. (2016), The Ministry of Health, Labour and Welfare
7. The United States Pharmacopoeia, (2014), The United States Pharmacopeial Convention. 12601 Twinbrook Parkway, Rockvukke, MD 20852.