LICKSON®

CE

TECHNICAL SHEET

TRYPTONE (TRYPTIC) SOY BROTH

IVD in Class A, EU Reg. 2017/746
For in vitro diagnostic use **IVD**

DESCRIPTION
Tryptone (Tryptic) Soy Broth (Soybean-Casein Digest Medium) is a general purpose liquid enrichment medium used in qualitative procedures for the sterility test and for the enrichment and cultivation of aerobic microorganisms that are not excessively fastidious.
In clinical microbiology, it may be used for the suspension, enrichment and cultivation of strains isolated on other media.

PRINCIPLE
Tryptone (Tryptic) Soy Broth is a nutritious medium that will support the growth of a wide variety of microorganisms, especially common aerobic and facultatively anaerobic bacteria. Because of its capacity for growth promotion, this formulation was adopted by The United States Pharmacopeia (USP) and the European Pharmacopeia (EP) as a sterility test medium.
In clinical microbiology, the medium is used in a variety of procedures, e.g., for the preparation of the inoculum and for suspending strains for Kirby-Bauer disc diffusion susceptibility testing, and for the microbiological test procedure of culture media according to the NCCLS standards.
In Tryptone (Tryptic) Soy Broth, enzymatic digests of casein and soybean meal provide amino acids and other complex nitrogenous substances. Glucose is an energy source. Sodium chloride maintains the osmotic equilibrium. Dibasic potassium phosphate acts as a buffer to control pH.

COMPOSITION	g/L
Tryptone (Pancreatic Digest of Casein)	17.0
Peptic Digest of Soybean Meal	3.0
Glucose	2.5
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	2.5

Final pH 7,3 ± 0,2 at 25°C

WARNING AND PRECAUTIONS
For in vitro diagnostic use.
Observe the precautions normally taken when handling laboratory reagents.
Dehydrated medium: HIGHLY HYGROSCOPIC. During the handling, wear dust protection mask. Avoid the eye contact. Do not use beyond the expiration date or if the product shows signs of deterioration, an altered color or has compacted.
Prepared Medium: The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.
Safety Data Sheet is available on request for professional users.
All wast must be disposed of according to local directives.

STORAGE AND STABILITY	
Dehydrated medium:	10-30°C
Prepared medium:	10-25°C

The product is stable until the expiration date indicated on the label under the recommended storage conditions.

PREPARATION
Dehydrated medium: Suspend 30 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes.
Prepared medium (bottles, tubes): ready-to-use.

PROCEDURE
For application in clinical microbiology, inoculate the medium with the strain and incubate as required. Note that specimens should also be inoculated directly onto solid media, such as Columbia Agar with 5% Sheep Blood or Trypticase Soy Agar with 5% Sheep Blood and, eventually, on additional selective and nonselective media.
Usually, an incubation temperature of 35 ± 2° C is adequate. Incubate for 18 to 24 h or longer if required.
For use as a suspension medium, inoculate the tube with a small amount of growth from an overnight culture on a solid medium.
For use in industrial microbiology, inoculate the sample or material to be tested into the medium. According to the European Pharmacopeia, incubate aerobically at 32.5 ± 2.5°C for a maximum of 3 days (for the bacteria) and at 22.5 ± 2.5° C for a maximum of 5 days (for the fungi).
For use in sterility testing, consult the USP or EP for procedural details and specifications for volume of medium relative to container size.

RESULTS
The presence of turbidity compared to an uninoculated control or a pellicle formation indicate microbial growth. Subculture to suitable solid media for complete identification of the isolated colonies. If the material being tested renders the medium turbid and a visual examination is not possible at the end of the incubation period, subculture to fresh TSB or onto appropriate solid media to ensure that turbidity is caused by the sample only and it is not a result of microorganisms multiplying in the broth.

QUALITY CONTROL
Dehydrated medium: free-flowing, homogeneous, light beige.
Prepared medium: clear to very slightly opalescent, light amber to amber.

Incubation conditions: 37°C for 24-48 hours:

MICROORGANISM	GROWTH
Bacillus subtilis ATCC 6633	Good-Luxuriant
Micrococcus luteus ATCC 9341	Good-Luxuriant
Staphylococcus aureus ATCC 25923	Good-Luxuriant
Streptococcus pneumoniae ATCC 6303	Good-Luxuriant
Neisseria meningitidis ATCC 13090	Good
Candida albicans ATCC 10231	Good-Luxuriant

REFERENCES

1. Marshall, R.T. (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
2. MacFaddin, J.F. 1985. Media for the isolation – cultivation – maintenance of medical bacteria. Volume 1. Williams and Wilkins, Baltimore, London
3. U.S. Pharmacopeial Convention, Inc. 1999. The U.S. Pharmacopeia 24/The national formulary NF 19--2000. U.S. Pharmacopeial Convention, Inc., Rockville, Md
4. Council of Europe, 2002. European Pharmacopoeia, 4th edition. European Pharmacopoeia Secretariat. Strasbourg/France.
5. National Committee for Clinical Laboratory Standards. 2000. Approved standard: M2-A7. Performance standards for antimicrobial disk susceptibility tests, 7th ed. National Committee for Clinical Laboratory Standards, Wayne, Pa.
6. National Committee for Clinical Laboratory Standards. 1996. M22-A2. Quality assurance for commercially prepared microbiological culture media – second edition; approved standard. NCCLS. Wayne, PA, USA.

PRESENTATION	Packaging	REF.
Dehydrated medium:		
TRYPTONE (TRYPTIC) SOY BROTH		
	100 g	**11196**
	500 g (16.6 L)	**10196**
Prepared medium:		
TRYPTONE (TRYPTIC) SOY BROTH		
	6 x 100 mL bottles	**64319**
	6 x 200 mL bottles	**64219**
	20 x 10 mL Tubes	**5140/20**
	100 x 10 mL Tubes	**5140/A**

SYMBOLS

Read the instructions — **Biological hazard**
CE Mark (product complies with the requirements of Regulation (EU) 746/2017)
Temperature limitation — **Use by**
For in vitro diagnostic use — **Manufacturer**

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