

TECHNICAL DATA SHEET

Article No. 9710

Tryptic Soy Broth (TSB), ready-to-use culture medium

SPECIFICATION

Prepared medium in tubes, sterile. Highly nutrient liquid medium for general purpose use, formulated according to Pharmacopeial Harmonised Method from pharmaceutical and clinical uses.

Colour: Yellow
pH: 7.3 ± 0.2 at 25 °C

COMPOSITION IN G/ L

Casein peptone	17.00
Soy-peptone	3.00
Sodium chloride	5.00
Dipotassium phosphate	2.50
D(+)-Glucose (Dextrose) monohydrate	2.50 ⁽¹⁾

⁽¹⁾ Equivalent to 2.3 g of D(+)-Glucose anhydrous.

PACKAGE DETAILS

9710-20x9ML

Tubes size	16x113 mm
Volume	9 ± 0,1 ml
Packaging unit	20 tubes

1 box with 20x9 mL tubes, 16x113 mm glass tubes, ink labelled and metal-Non injectable cap.

9710-20x10ML

Tubes size	16x113 mm
Volume	10 ± 0,3 ml
Packaging unit	20 tubes

1 box with 20x10 ml tubes, 16x113 mm glass tubes, ink labelled and metal-Non injectable cap.



DESCRIPTION/ TECHNIQUE

Description:

The Tryptic Soy Broth (TSB) was initially developed for the cultivation of very fastidious microorganisms without the addition of serum, blood or any other enrichment agent.

As a general purpose culture medium it supports the growth of most organisms, both aerobes and facultative anaerobes, even if their requirements are high. Due to its high vitamin content *Brucella*, *Pasteurella* and *Streptococcus* are perfectly viable, moreover a CO₂ enriched atmosphere can further enhance growth.

In anaerobic conditions this broth will grow *Bacteroides* and *Clostridium species*.

Tryptic Soy Broth's superior growth-promoting properties make it particularly suitable for tube dilution methods for antibiotic sensitivity testing.

The broth can be used for bile solubility testing in pneumococci, also for catalase and coagulase assays and for the preparation of hypersaline broths. It is a most suitable medium for the preparation of antigens and toxins in bacteria, moulds and yeasts.

TSB is used as a primary enrichment medium for food examination. In the dairy industry it is employed for testing resazurine reduction. The medium is not suitable for maintenance purposes since carbohydrate fermentation liberates many acids which may threaten the organism's viability. Therefore, though it allows the growth of streptococci and *Neisseria*, these species tend to die if repeatedly subcultured in this medium.

Technique:

Sterility Test:

Use according expected results, according type of samples and validated methods.

Be specially aware of the guidelines described in the pharmacopeia for using the test for sterility.

Read the turbidity as growth indicator.

Each laboratory must evaluate the results according to their specifications.

Precautions for use:

For professional use only.

Do not use if the product is contaminated, broken, or spoiled.

Store in a dark, dry place in their original packaging.

Avoid freezing and overheating.

The expiration date is the date of maximum inoculation.

The clinical samples to be processed may contain important pathogens, so once used they must be eliminated according to the current regulations of infectious products.

MICROBIOLOGICAL CONTROL

Inoculate 10 - 100 CFU per unit according to harmonized Eur. Pharmacopoeia

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020

Aerobic. Incubation at 30-35 °C for 18-72h (bacteria) and 20-25 °C for 3-5 days (moulds and yeast).

Microorganism	Growth
<i>Bacillus subtilis</i> ATCC® 6633, WDCM 00003	Good
<i>Ps. aeruginosa</i> ATCC® 9027, WDCM 00026	Good
<i>Staphylococcus aureus</i> ATCC® 6538, WDCM 00032	Good
<i>Salmonella typhimurium</i> ATCC® 14028, WDCM 00031	Good
<i>Escherichia coli</i> ATCC® 8739, WDCM 00012	Good
<i>Candida albicans</i> ATCC® 10231, WDCM 00054	Good
<i>Streptococcus pneumoniae</i> ATCC® 49619	Good
<i>Streptococcus pyogenes</i> ATCC® 19615	Good
<i>Aspergillus brasiliensis</i> ATCC® 16404, WDCM 00053	Good
<i>Shigella flexneri</i> ATCC® 12022, WDCM 00126	Good

Sterility control:

Incubation 48 hours at 30-35 °C and 48 hours at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.

REFERENCES

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- EUROPEAN PHARMACOPOEIA 10.0 (2020) 10th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. EDQM. Council of Europe. Strasbourg.
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- ISO 9308-1 Standard (2000) Water Quality. Detection and enumeration of E. coli and coliform bacteria. Membrane filtration method.
- PASCUAL ANDERSON, M^ªR^ª (1992) Microbiología Alimentaria. Díaz de Santos S.A., Madrid.
- USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.
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STORAGE

8 - 25 °C

SHELF LIFE

12 months unopened from date of manufacture

created: 13.09.2022

