

Specification

Highly nutrient liquid medium for general purpose use, formulated according to Pharmacopeial Harmonised Method.

Presentation

	Packaging Details	Shelf Life	Storage
20 Tubes Tube 16 x 113 mm with: 9 ± 0.2 ml	1 box with 20 tubes, 16x113 mm glass tubes, ink labelled and metal-Non injectable cap..	12 months	2-25 °C

Composition

Composition (g/l):

Peptone from casein	17.0
Soya 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.

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 aerob 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, and also used 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 sub-cultured 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 in vitro diagnostic use. Do not reuse. 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.

Quality control

Physical/Chemical control

Color : yellow

pH: 7.3 ± 0.2 at 25°C

Microbiological control

Inoculate 10 - 100 CFU (productivity) according to harmonized Eur. Pharmacopoeia

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

Aerobiosis. Incubation at 30-35 °C for 18-24 hours for bacteria, and at 20-25 °C for fungi and yeasts for 3-5 days.

B. subtilis double incubation temp. 30-35 °C / 20-25 °C

Microorganism

Growth

<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
<i>Bacillus subtilis</i> ATCC® 6633, WDCM 00003 (20-25°C)	Good
<i>Bacillus subtilis</i> ATCC® 6633, WDCM 00003 (30-35°C)	Good

Sterility control

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

Check at 14 days after incubation in same conditions.

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