



Tryptic Soy Broth VEG

Liquid medium for the isolation and cultivation of a wide variety of organisms.

DESCRIPTION

Tryptic Soy Broth (TSB) VEG is a nutritious medium used for the detection, isolation and cultivation of fastidious and nonfastidious microorganisms including bacteria and fungi from various types of sample.

This medium contains vegetable peptones and is free of any ingredient of animal origin. That eliminates regulatory issues and concerns related to use of animal-derived products such as contamination risk with TSE/BSE.

TSB VEG is an alternative to Casein Soya Bean Digest Broth recommended in the harmonised USP/EP/JP method for sterility testing and microbiological examination of non-sterile products as well as by the CLSI for inoculum preparation in antibiotic susceptibility testing.

The microbiological performance and applications of TSB VEG are the same as the standard TSB.

TYPICAL FORMULA*	(g/l)
Wheat Peptone	17.0
Papaic Digest of Soya Bean	3.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	2.5
Glucose Monohydrate	2.5
Final pH 7.3 ± 0.2 at 25°C	

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

METHOD PRINCIPLE

Wheat peptone (a certified non-animal peptone) and papaic digest of soya bean provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Sodium chloride maintains osmotic balance in the medium. Dipotassium phosphate is a buffering agent. Glucose is an energy source.

PREPARATION

Dehydrated medium

Suspend 30.0 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Dispense into final containers. Autoclave at 121°C for 15 minutes.

TEST PROCEDURE

For use in industrial microbiology, inoculate the sample or material to be tested into the medium. Incubate under appropriate atmosphere at 30-35°C for 18-72 hour (bacteria) and at 20-25°C for a up to 5 days (fungi).

For sterility testing, the way of inoculation depends on the type and size of test material. If membrane filtration is carried out, a suitable diluent should be used. For direct inoculation, it is recommended a minimum 1:10 dilution of the sample to the culture medium. Incubate at 20-25°C for 14 days.

For media fill test in biopharmaceutical manufacturing, two incubation temperatures are used. The initial incubation at 20-25°C for 7 days, and then at 30-35°C for further 7 days.

INTERPRETING 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 VEG 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.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

Dehydrated medium: 4 years.

QUALITY CONTROL

Appearance of Dehydrated Medium: Free-flowing, homogeneous, light beige.

Appearance of Prepared Medium: Clear to very slightly opalescent, light amber to amber.

Expected Cultural Response:

Control strain	Inoculum	Incubation	Specification
<i>Staphylococcus aureus</i>	WDCM 00032 (ATCC® 6538; NCTC 10788)	18-24 h / 30-35°C	Good growth
<i>Staphylococcus aureus</i>	WDCM 00034 (ATCC® 25923; NCTC 12981)		Good growth
<i>Escherichia coli</i>	WDCM 00012 (ATCC® 8739; NCTC 12923)		Good growth
<i>Escherichia coli</i>	WDCM 00013 (ATCC® 25922; NCTC 12241)		Good growth
<i>Pseudomonas aeruginosa</i>	WDCM 00026 (ATCC® 9027; NCTC 12924)		Good growth
<i>Bacillus subtilis</i>	WDCM 00003 (ATCC® 6633; NCTC 10400)		Good growth
<i>Salmonella Typhimurium</i>	WDCM 00031 (ATCC® 14028; NCTC 12023)		Good growth
<i>Candida albicans</i>	WDCM 00054 (ATCC® 10231; NCPF 3179)	3-5 d / 20-25°C	Good growth
<i>Aspergillus brasiliensis</i>	WDCM 00053 (ATCC® 16404; NCPF 2275)		Good growth

Please refer to the actual batch related Certificate of Analysis (CoA).

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

See the references at the end of this document.

TABLE OF SYMBOLS

See the table of symbols at the end of this document.

The product is available in the configurations listed below. There may be additional product ref. numbers as well. For an updated listing of available products, visit liofilchem.com

Product	Format	Packaging	Ref.
Tryptic Soy Broth (TSB) VEG	Dehydrated medium	500 g	610701

Significant changes from previous version:

Document	Release Date	Change Summary
610701_IFU-0	2022-11-17	Document creation

This IFU document and the SDS are available from the online Support Center:

lioilchem.com/ifu-sds

References

1. European Pharmacopoeia (EP) 2.6.12 Microbiological examination of non-sterile products: Microbial enumeration tests; 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms.
2. United States Pharmacopoeia (USP) <61> Microbiological examination of non-sterile products: Microbial enumeration tests; <62> Microbiological examination of non-sterile products: Test for specified microorganisms.
3. Japanese Pharmacopoeia (JP) 4.05 Microbial Limit Test I. Microbiological examination of non-sterile products: Total viable aerobic countII; II. Microbiological examination of non-sterile products: Test for specified microorganisms.
4. Clinical and Laboratory Standards Institute (CLSI). Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria that Grow Aerobically. CLSI document M07.
5. PDA Technical Report - Fundamentals of an Environmental Monitoring Program.
6. Guidance for Industry: Sterile Drug Products Produced by Aseptic Processing - Current Good Manufacturing Practice.

Table of Symbols

	Batch code
	Catalogue number
	Manufacturer
	Use by
	Fragile, handle with care
	Temperature limitation
	Contains sufficient for <n> tests
	Consult instructions for use
	Do not reuse
	Keep away from sunlight



Liofilchem® s.r.l.

Via Scozia, 64026 Roseto degli Abruzzi (TE) Italy

Tel. +39 0858930745

Fax +39 0858930330

www.liofilchem.com

lioilchem@lioilchem.com