

Specification

General purpose solid medium containing animal and plant peptone according to Pharmacopoeial Harmonised Method and ISO Standards.

Presentation

20 Prepared Plates
90 mm
with: 21 ± 2 ml

Packaging Details

1 box with 2 packs of 10 plates/pack. Single cellophane.

Shelf Life

3 months

Storage

2-14°C

Composition

Composition (g/l):

Peptone from Casein 15.00

Soya peptone..... 5.00

Sodium chloride..... 5.00

Agar..... 15.00

Description /Technique

Description

TSA is a widely used medium containing two peptones which support the growth of a wide variety of organisms, even that of very fastidious ones such as *Neisseria*, *Listeria*, *Brucella*, etc. It is frequently used for routine diagnostic purposes due to its reliability and its easily reproducible results.

Classical media for microbiological examination of non-sterile products according to Pharmacopoeial Harmonised Methods.

Technique

This medium can be inoculated directly or after enrichment broth.

Spread the plates by streaking methodology or by spiral method.

The inoculated plates are incubated at 30-35 ° C for 24-72 h (bacteria) and 3-5 days for fungi (yeast & molds). Examined daily (Incubation times greater than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications).

Each laboratory must evaluate the results according to their specifications.

Quality control

Physical/Chemical control

Color : Straw-coloured yellow pH: 7.3 ± 0.2 at 25°C

Microbiological control

Growth Promotion Test according to harmonized pharmacopoeial monographs and test methods & ISO 11133:2014

Inoculate: 50-100 CFU (Productivity) according to harmonized Eur. Pharmacopoeia.

Aerobiosis. Incubation at 30-35 °C. Read after 18-24h to 72 h for bacteria and 3-5 days for fungi.

Microorganism

Escherichia coli ATCC® 8739, WDCM 00012

Staphylococcus aureus ATCC® 6538, WDCM 00032

Bacillus subtilis ATCC® 6633, WDCM 00003

Candida albicans ATCC® 10231, WDCM 00054

Ps. aeruginosa ATCC® 9027, WDCM 00026

Salmonella typhimurium ATCC® 14028, WDCM 00031

Aspergillus brasiliensis ATCC® 16404, WDCM 00053

L. monocytogenes ATCC® 13932, WDCM 00021

Bacillus cereus ATCC® 11778, WDCM 00001

Enterococcus faecalis ATCC® 29212, WDCM 00087

Growth

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

Good (≥ 70 %)

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

Bibliography

- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- COLIPA (1997) Guidelines on Microbial Quality Management (MQM). Brussels.
- DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Food, 4th ed, ASM, Washington D.C.
- EUROPEAN PHARMACOPOEIA 8.0 (2014) 8th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. EDQM. Council of Europe. Strasbourg.
- FDA (Food and Drug Administrations) (1998) Bacteriological Analytical Manual. 8th ed. Revision A. AOAC International. Gaithersburg. MD.
- HORWITZ, W. (2000) Official Methods of Analysis of AOAC INTERNATIONAL, 17th ed. Gaithersburg, MD. USA.
- ISO 9308-1 Standard (2000) Water Quality. Detection and enumeration of *E. coli* and coliform bacteria. Membrane filtration method.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO 22717 Standard (2015) Cosmetics - Microbiology - Detection of *Pseudomonas aeruginosa*.
- ISO/TS 22964 (2006) Milk and milk products.- Detection of *Enterobacter sakazakii*.
- PASCUAL ANDERSON, M^ºR^º (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.