

## Specification

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

## Presentation

	Packaging Details	Shelf Life	Storage
20 Prepared Plates 90 mm with: 21 ± 2 ml	1 box with 2 packs of 10 plates/pack. Single cellophane.	3 months	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.

### Precautions

For in vitro diagnostic use. Do not reuse. For professional use only.

Do not use the product if it shows evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

## Quality control

### Physical/Chemical control

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

### Microbiological control

Growth Promotion Test 50-100 CFU according to harmonized Pharmacopoeia monographs (EP) and test methods & ISO 11133:2014/A1:2018

Inoculate: 50-100 CFU (productivity) according to harmonized Eur. Pharmacopoeia and ISO 11133 standard.

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

Aerobiosis. Incubation at 30-35-37 °C. Read after 18-24 h 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

*Clostridium perfringens* ATCC® 13124, WDCM 00007, NCTC® 8237

*Clostridium sporogenes* ATCC® 19404, WDCM 00008

*Stph. aureus* ATCC® 25923, WDCM 00034

*Escherichia coli* ATCC® 11775, WDCM 00090

### Growth

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

Good (≥70%)

### Sterility Control

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

Check at 7 days after incubation in same conditions.

## Bibliography

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- ISO 21150 Standard (2015) Cosmetics - Microbiology - Detection of *Escherichia coli*.
- ISO 22717 Standard (2015) Cosmetics - Microbiology - Detection of *Pseudomonas aeruginosa*.
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- ISO 22964 (2017) Microbiology of the food chain.- Horizontal method for the detection of *Cronobacter spp*
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Revision date: 04/03/25

**Reference:** 101114ZA      **Technical Data Sheet**

**Product:** **Tryptic Soy Agar (TSA) (EP)**



## Storage

Storage conditions: 2-14°C

Alternatively the plates may also be stored at the range of 2 - 25°C, with a proper performance of the medium, but some precautions must be taken into account:

- In the range of 2 - 8 °C avoid direct contact with surfaces that can freeze product.
- In the range of 15 - 25 °C, dehydration control must be taking in account.