

**Product :
MICROBIAL CONTENT TEST AGAR (TSA
LECITHIN & POLYSORBATE)**
Also known as

TSA with Lecithin and Tween

Specification

Solid medium for the sampling of surfaces of sanitary importance using the contact plate technique.

Formula * in g/L

| | |
|-----------------------|-------|
| Tryptone | 15.00 |
| Soy peptone | 5.00 |
| Sodium chloride | 5.00 |
| Lecithin | 0.70 |
| Polysorbate 80..... | 5.00 |
| Agar | 15.00 |

Final pH 7.3 ±0.2 at 25 °C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Suspend 45.7 g in 1 l of distilled water. Let it soak and heat to boiling. Distribute in suitable containers and sterilize by autoclaving at 121 °C for 15 minutes.

Description

This medium is a modification of the classical TSA for surface sampling by the contact plate technique. Lecithin and Polysorbate 80 are incorporated to neutralize quaternary ammonium compounds, phenolic disinfectants, hexachlorophene, formalin and ethanol.

The dehydrated medium has a characteristic "brown sugar" appearance and may seem moist due to the inclusion of these agents.

Collection of samples from identical areas (replicate) "before and after" treatment with disinfectant yields data useful for evaluating cleaning procedures in environmental sanitation.

Quality control
Incubation temperature: 30-35 °C

Incubation time: 24-48 h - 5 days

Inoculum: Practical range 50-100 CFU (productivity), according to Ph.Eur. and ISO 11133:2014/Amd 1:2018 . Spiral Plate Method.

Microorganism
Growth
Remarks

| | | |
|---|---------------------|-------------------------|
| <i>Staphylococcus aureus</i> ATCC® 6538 | Productivity > 0.70 | - |
| <i>Pseudomonas aeruginosa</i> ATCC® 27853 | Productivity > 0.70 | - |
| <i>Bacillus subtilis</i> ATCC® 6633 | Productivity > 0.70 | - |
| <i>Escherichia coli</i> ATCC® 8739 | Productivity > 0.70 | - |
| <i>Aspergillus brasiliensis</i> ATCC® 16404 | Productivity > 0.70 | 5 d (Black sporulation) |
| <i>Candida albicans</i> ATCC® 10231 | Productivity > 0.70 | 48 h |

References

- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Culture Media. CRC Press. Boca Ratón. Fla.
- EVANCHO, G.M., W.H. SVEUM, LL. J. MOBERG & J.F. FRANK (2001) Microbiological Monitoring of the Food Processing Environment. In Downes & Ito (Eds) Compendium of Methods for the Microbiological Examination of Foods. 4th ed. APHA. Washington. DC.
- HICKEY, P.J., C.E. BECKELHEIMER & T. PARROW (1992) Microbiological tests for equipment, containers, water and air. In R.T. Marshall (Ed.) Standard Methods for the examination of Dairy Products. 16th ed. APHA. Washington. DC.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).