

BacterLab Division



Issue date: 02/01/2025

Version: 01.2025

SURFACE SAMPLE COLLECTION MEDIUM

BacterContact™ Tryptic Soy Agar + LTH

A basic nutrient medium used for culturing a wide range of microorganisms in surface sampling, supplemented with neutralizing agents to inactivate residual surface disinfectants

Code: 12008

BacterContact™
Tryptic Soy Agar + LTH



1. INTENDED USE

BacterContact™ Tryptic Soy Agar + LTH is a basic nutrient medium used for culturing a wide range of microorganisms in surface microbiological sampling, supplemented with neutralizing agents to inactivate surface disinfectants.

The packaging with semi-permeable Cellophane film helps balance the humidity of the environment during storage.

2. PRINCIPLES

BacterContact™ Tryptic Soy Agar + LTH: Pancreatic Digest of Casein is a type of peptide consisting of amino acids extracted from milk protein, which facilitates bacterial growth; Peptic Digest of Soybean Meal is a peptide extracted from soybeans, providing nutrients and growth factors; Sodium Chloride creates a saline environment to maintain pH balance inside and outside the bacteria; lecithin (L), tween 80 (T), and histidine (H) act to neutralize residual disinfectant chemicals.

3. TYPICAL COMPOSITION

For 1 liter of medium

Tryptone	15,0 g
Papaic digest of soybean meal	5,0 g
Sodium chloride	5,0 g
Polysorbate (Tween) 80	5,0 mL
Lecithin	0,7 g
Histidine	0,5 g
Agar	15,0 g

pH of the ready-to-use media at 25 °C: $7,3 \pm 0,2$

4. PREPARATION

The environmental plates are ready-to-use, no preparation required.

5. INSTRUCTIONS FOR USE

- Prepare the surface to be tested: Clean the surface to be tested using a 70% alcohol solution or another cleaning solution. Then, wait for the surface to dry completely.
- Open the pre-packaged BacterContact plates: Ensure that the packaging of the plates is not torn or damaged before opening.
- Place the Contact plate on the surface to be tested: Press the Rodac plate onto the surface to be tested. The recommended contact time between the plate and the test surface is 10 seconds with a pressing force of 500g.
- Seal the Rodac plate: Make sure that the lid of the Rodac plate is tightly closed. Wipe the surface again with 70% alcohol.
- Evaluation of Results: Incubate under the following conditions
30 – 35 °C for 72 ± 6 hours (NF EN ISO 21149, NF EN ISO 18415)

20 – 25 °C for 3 to 5 days for Total Microbial Count (Pharmacopoeia)

6. RESULTS

After incubation for the required period, typically 3–5 days, the plates are examined for the presence of microorganisms. The results are assessed by counting the number of microbial colonies on the plates.

7. QUALITY CONTROL

BacterLab ensures the quality of each product batch by testing with ATCC reference strains.

Microorganisms	Incubation conditions	Expected results
<i>P. aeruginosa</i> ATCC 9027	20 – 24 hours of incubation at 30 – 35 °C	$P_R \geq 70 \%$
<i>S. aureus</i> ATCC 25923		
<i>E. coli</i> ATCC 35218		
<i>C. albicans</i> ATCC 10231	72 hours of incubation at 20 – 25°C	$P_R \geq 50 \%$
<i>A. brasiliensis</i> ATCC 16404		

8. STORAGE AND TRANSPORT CONDITIONS

- Storage: 2 – 8°C.
- Transportation: Ambient temperature.

9. PACKAGING

- Packaging: 10 plates/ box or as per customer request.

10. SHELF LIFE

- Expiration Date: 06 months from the manufacturing date.

11. BIBLIOGRAPHY

- Solabia Group. *Tryptic Soy Agar*. Biokar Diagnostics. Retrieved from: https://www.solabia.com/biokar-diagnostics/product/tryptone-soy-agar/?documentation=2232&_wpnonce=065ae35223
- PDA Journal of Pharmaceutical Science and Technology July 1992. *A Comparison of Two Commercially Irradiated Trypticase Soy Agars Containing Lecithin and Polysorbate 80*. PDA F. Marsik and j. Fowler. Retrieved from: <https://journal.pda.org/content/46/4/130>
- PubMed Central. (2019). Cetylpyridinium chloride produces increased zeta-potential on Salmonella Typhimurium cells, a mechanism of the pathogen's inactivation. PMC6795798. Retrieved from: <https://pubmed.ncbi.nlm.nih.gov/31633036/>
- Centers for Disease Control and Prevention. (n.d.). Neutralization of Germicides. Infection Control. Retrieved April 14, 2025, from <https://www.cdc.gov/infection-control/hcp/disinfection-sterilization/germicide-neutralization.html/>

- International Organization for Standardization. *ISO 18593:2018 – Microbiology of the food chain – Horizontal methods for surface sampling*. Geneva: ISO; 2018