PanReac AppliChem

PRODUCT CODE: 455095

TSA-Tween-Lecithin-Agar (Ph. Eur.) (Prepared Plate (@ 90 mm)) for microbiology

Specification

General purpose medium for isolation and culture of microorganisms with neutralisers.

Presentation

20 Plates /Irradiated	Packaging Details	Shelf life	Storage
90 mm - Double wrapping with: 21 ± 2 ml.	1 box with 2 cellophane bags (double wrapping) with 10 plates/bag. Every pack exhibitis an irradiation indicator (8-14kGy)	3.5 months	2-14ºC
Description and Technique			

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 Pharmacopeial Harmonised Methods.

The addition of he neutralizing agents TLHTh (Tween 80 - Lecithin - Histidine - Sodium Thiosulphate) may inactivate a variety of disinfectants.

- * The combination of lecithin, polysorbate 80 and histidine neutralizes aldehydes and phenolic compounds.
- * The combination of lecithin and polysorbate 80 neutralizes the quaternary ammonium compounds.
- * The polysorbate 80 neutralizes hexachlorophene and mercurial derivates.
- * Sodium thiosulphate neutralizers halogen compounds.
- * Lecithin neutralizes clorhexidine.
- * Histidine neutralizes formaldehyde.

Technique

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results. This medium is also well suited for air environmental sampling (total compatibility with most commercially available air samplers) or for other types of environmental sampling (e.g. fingers or gloves of operators, swab streaking.).

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 then those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications, This medium can be inoculated directly or after enrichment broth).

After incubation, enumerate all the colonies that have appeared onto the surface of the agar. Each laboratory must evaluate the results according to their specifications. Calculate total microbial count per ml of sample by multiplying the average number of colonies per plate by the inverse dilution factor if streaked a diluted sample.

Report results as Colony Forming Unit (CFU's) per ml or g along with incubation time and temperature.

Quality control

Physical/Chemical control	Microbiological control	Sterility control
Color: Straw-coloured yellow pH: 7.3 ± 0.2 at 25⁰C	Growth Promotion Test according to harmonized pharmacopoeial monographs and test methods & ISO 11133:2014 Inoculate: Practical range 100 ± 20 CFU; Min. 50 CFU (Productivity)/ $10^4 - 10^6$ (Selectivity).	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
	Aerobiosis.Incubation at 30-35 °C. Read after 18-24h to 72 h for bacteria and 3-5 days for fungi.	
Microorganism		Growth
Escherichia coli ATCC® 8739, WDCM 00012		Good (≥70 %)
Staphylococcus aureus ATCC® 6538, WDCM 00032		Good (≥70 %)
Bacillus subtilis ATCC® 6633, WDCM 00003		Good (≥70 %)
Aspergillus brasiliensis ATCC® 16404, WDCM 00053		Good (≥70 %)
Candida albicans ATCC® 10231, WDCM 00054		Poor to good
Ps. aeruginosa ATCC® 9027, WDCM 00026		Good (≥70 %)