

51414 Tryptic Soya Agar with Polysorbate 80 and Lecithin

(Microbial Content Test Agar; Tryptone Soya Agar with Polysorbate 80 and Lecithin; TSA with Polysorbate 80 and Lecithin; CASO Agar with Polysorbate 80 and Lecithin; Soybean Casein digest Agar with Polysorbate 80 and Lecithin)

Tryptone Soya Agar with Polysorbate 80 and Lecithin is used for determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics etc.

Composition:

Ingredients	Grams/Litre
Peptone from casein	15.0
Papaic digest of soyabean meal	5.0
Sodium chloride	5.0
Polysorbate 80 (Tween 80)	5.0
Lecithin	0.7
Agar	15.0
Final pH 7.3 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Light yellow coloured, homogeneous, free flowing powder.
 Colour and Clarity: Light to medium amber coloured, slightly opalescent gel forms in petri plates.

Directions:

Suspend 45.7 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 12 to 15 lbs pressure (118°C - 121°C) for 15 minutes. Mix well and pour in Petri dishes or RODAC (Replicate Organism Detection and Counting) plates (~ 17 ml).

Principle and Interpretation:

Peptone from casein and papaic digest of soyabean meal act as a source of nitrogen, carbon and amino acids. Sodium chloride maintains the osmotic balance. Lecithin and Polysorbate 80 neutralize many residual disinfectants. Polysorbate 80 inactivate phenols, hexachlorophene and formalin, while lecithin neutralize quaternary ammonium compounds (1-3). Agar is the solidifying agent.

Cultural characteristics after 18-24 hours at 35-37°C.

Organisms (ATCC)	Growth	Growth with disinfectant*
<i>Escherichia coli</i> (25922)	+++	++
<i>Pseudomonas aeruginosa</i> (27853)	+++	++
<i>Staphylococcus aureus</i> (25923)	+++	++

* depends on concentration of quaternary ammonium compounds



References:

1. R.I. Quisno, W. Gibby, M.J. Foter, A neutralizing medium for evaluating the germicidal potency of the quaternary ammonium salts, Am. J. Pharm., 118, 320-323 (1946)
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4. E.H. Lennette, E.H. Spaulding, J.P. Truant, Manual of Clinical Microbiology. 2nd ed. Washington D.C.: American Society for Microbiology (1974)
5. Jean F. Mac Faddin, Media for Isolation-Cultivation Identification-Maintenance of Medical Bacteria. Vol. I, Baltimore, MD.: Williams & Wilkins (1985)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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