

22089 Casein peptone Lecithin Polysorbate Broth (Tryptone Soya Lecithin Polysorbate Broth; Tryptic Soy Lecithin Polysorbate Broth; TAT Broth; Tryptone-Azolectin-Tween Broth)

For the dilution of samples from pharmaceutical, cosmetic and raw material or end-products, for the purpose of enumeration or for sanitary examination of surfaces.

Composition:

Ingredients	Grams/Litre
Casein peptone	20.0
Soja lecithin	5.0
Final pH 7.1 - 7.5 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. Use before expiry date on the label.

Appearance: Faintly beige to light yellow coloured, homogeneous, free flowing powder.
Color and Clarity: Yellow, clear to slightly turbid solution.

Directions:

Suspend 25 g in 960 ml distilled water. Heat in a water-bath at 50°C for approximately 30 minutes until the powder is completely dissolved. Add 40 ml polysorbate (Tween® 20) and sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:

Casein Peptone Lecithin Polysorbate Broth is recommended for sanitary examination of surfaces. (1). According to Weber and Black this purpose necessitates a highly nutritional medium containing neutralizing agents for quaternary ammonium compounds (2,3). Casein enzymatic hydrolysate provides the necessary nutrients for the growth of microorganisms. Soya lecithin neutralizes the quaternary ammonium compounds (as benzalkoniumchloride, denatonium, TBAH etc. often contained in surface disinfectants). Polysorbate (Tween® 20) is added in order to disarm phenolic disinfectants, hexachlorophene and formalin.

Cultural characteristics observed after 18-24 hours with an incubation at 35-37°C. For fungal species an incubation for 24-48 hours at 25-30°C is recommended.

Organisms (ATCC)	Growth
<i>Escherichia coli</i> (25922)	+++
<i>Bacillus subtilis</i> (6633)	+++
<i>Staphylococcus aureus</i> (25923)	+++
<i>Candida albicans</i> (10231)	+++



References:

1. US PHARMAKOPOEIA (2002) <61> Microbial Limits Tests. 25th ed. US Pharmacopoeial Conv. Inc. Rockville. MD
2. Weber and Black, 1948, Soap and Sanitary Chemicals, 24:134
3. Weber and Black, 1948, Am. J. Public Health, 38:1405
4. Favero (chm.), Microbiological Sampling of Surfaces, Biological Contamination Control Comitee, American Asso. for contamination control (1967)

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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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