



## Casein-peptone Lecithin Polysorbate

### Broth Base - TAT Broth | AS-1357

Used for cultivating microorganisms from highly viscous or gelatinous materials (with added polysorbate 20).

Casein peptone lecithin polysorbate broth base, also known as TAT Broth, is a neutralizing broth that is mostly used for sample dilution in cosmetics, pharmaceuticals, and other related fields. The medium is developed to facilitate the recovery of injured microorganisms by providing the best conditions possible for their development and recovery.

A rich amount of nutrients is provided by the addition of casein peptone, which aids in the healing of injured cells. To neutralize different antimicrobial substances like phenols and quaternary ammonium compounds, lecithin and polysorbate 20 work as neutralizing agents. Since thioglycolate can obstruct the inactivation of some preservatives, it is purposefully left out.

#### Composition (gr/L)

Pancreatic Digest of Casein	20
Soy Lecithin	5
Final pH at 25°C	7.2 ± 0.2

#### Preparation

Dissolve 25 g of the powder into 960 ml distilled water. Add 40 ml polysorbate 20 (Tween 20). Heat the medium in a water bath at 50 - 60°C for 15 - 30

minutes with agitation to dissolve completely. Autoclave at 121°C for 15 minutes.

#### Quality Control

Dehydrated Appearance: Beige, free-flowing, homogeneous.

Prepared Appearance: Light amber, clear to very slightly opalescent, may have a very slight precipitate.

Reaction of 2.5% Solution at 25°C: pH 7.2 ± 0.2

#### Microbial Test Results

Incubate at 35 ± 2 °C for 18 to 48 hours.

Organism (ATCC)	Recovery
<i>Bacillus subtilis</i> (6633)	Good
<i>Candida albicans</i> (26790)	Fair to Good
<i>Pseudomonas aeruginosa</i> (27853)	Good
<i>Staphylococcus aureus</i> (25923)	Good

#### Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.