

## PRODUCT INFORMATION

Product Type: Bottle product (150/200ml)

**Cat No. BP374 - TSA+ 1% POLYS.80 + 0.5% LECITHIN**

### Intended Use:

Tryptic Soy Agar (TSA) with 1% Tween 80 and 0.5% lecithin is primarily used for environmental monitoring and the validation of surface sanitization procedures in pharmaceutical, food, and healthcare settings. The medium is widely used for environmental air sampling and for swabbing surfaces to check for microbial contamination after cleaning and disinfection.

### Principles and uses:

#### Detection and Enumeration of Microorganisms on Surfaces:

This medium is used to recover and count bacteria and fungi from surfaces that have been cleaned or disinfected, particularly in environments where sanitation is critical (e.g., pharmaceutical production, hospitals, food processing).

#### Neutralization of Disinfectant Residues:

The addition of lecithin and Tween 80 (polysorbate 80) is crucial:

Lecithin neutralizes quaternary ammonium compounds (QACs), which are common surface disinfectants.

**Tween 80** neutralizes phenolic disinfectants, hexachlorophene, formalin, and, together with lecithin, ethanol.

This neutralization prevents residual disinfectants from inhibiting the growth of microorganisms that may be present, ensuring accurate recovery and enumeration.

### Composition:

|                             |          |
|-----------------------------|----------|
| Pancreatic Digest of Casein | 15.0 g/L |
| Papaic Digest of Soybean    | 5.0 g/L  |
| Sodium Chloride             | 5.0 g/L  |
| Agar                        | 15.0 g/L |
| Lecithin                    | 5 g/L    |
| Tween 80                    | 10 ml/L  |

**Storage:** 2-25°C

**pH at RT:** 7.1 - 7.5

**Appearance:** Light amber, slightly opalescent

**Exp. Date:** Printed on label and on the item.

**Required materials not supplied:** Laboratory equipment as required.

**Warning and Precautions:**

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Bottles if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Bottles may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

**Waste Disposal**

After interpretation all items should be destroyed by standard incineration methods.

**Performance Testing Results:**

**GPT:** 10-100 cfu (pour plate method\*).

| TEST                             | ATCC   | Incubation Temp. (°C) | Incubation Cond.     | Reaction 1 |
|----------------------------------|--------|-----------------------|----------------------|------------|
| <i>Staphylococcus aureus</i>     | 6538   | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Bacillus subtilis</i>         | 6633   | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Bacillus cereus</i>           | 11778  | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Listeria monocytogenes 4b</i> | 13932  | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Escherichia coli</i>          | 8739   | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Pseudomonas paraeruginosa</i> | 9027   | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Escherichia coli O157</i>     | 700728 | 30-35 °C              | Aerobic, 48 hours    | Growth     |
| <i>Candida albicans</i>          | 10231  | 30-35 °C              | Aerobic, 48-72 hours | Growth     |
| <i>Aspergillus brasiliensis</i>  | 16404  | 30-35 °C              | Aerobic, 48-72 hours | Growth     |
| <i>Candida albicans.</i>         | 10231  | 20-25 °C              | Aerobic, 3-5 days    | Growth     |
| <i>Aspergillus brasiliensis</i>  | 16404  | 20-25 °C              | Aerobic, 3-5 days    | Growth     |