

## TM 2284 – PLATE COUNT AGAR W/ TWEEN 80 AND LECITHIN (STANDARD METHODS AGAR W/ TWEEN 80 AND LECITHIN)

### INTENDED USE

For sanitary examination of surfaces that is for counts before and after application of disinfectants.

### PRODUCT SUMMARY AND EXPLANATION

Standard Methods Agar with Tween 80 and Lecithin is formulated as per APHA for the enumeration of microorganisms from flat and nonporous surfaces. For the purpose of this medium the plates should be prepared carefully to ensure the presence of meniscus of agar extending above the top of the poured plate.

### COMPOSITION

| Ingredients                | Gms / Ltr |
|----------------------------|-----------|
| Casein enzymic hydrolysate | 5.000     |
| Yeast extract              | 2.500     |
| Dextrose                   | 1.000     |
| Lecithin                   | 0.700     |
| Polysorbate 80 (Tween 80)  | 5.000     |
| Agar                       | 15.000    |

### PRINCIPLE

This medium consists of Casein enzymic hydrolysate which provides amino acids while yeast extract supplies vitamin B complex and dextrose gives energy to microorganisms. Polysorbate 80 and lecithin act as neutralizers to inactivate the residual disinfectants where the samples are collected. Lecithin inactivates quaternary ammonium compounds whereas polysorbate 80 neutralizes formalin, phenolic disinfectants, hexachlorophene etc.

### INSTRUCTION FOR USE

- Dissolve 29.2 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile petri plates.

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.  
**Appearance of prepared medium** : Light yellow coloured, clear to slightly opalescent gel forms in petri plates.  
**pH (at 25°C)** : 7.0 ± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



| Microorganism                | ATCC  | Inoculum (CFU/ml) | Growth    | Recovery | Incubation Temperature | Incubation Period |
|------------------------------|-------|-------------------|-----------|----------|------------------------|-------------------|
| <i>Escherichia coli</i>      | 25922 | 50-100            | Luxuriant | >=70 %   | 35-37°C                | 24-48 Hours       |
| <i>Staphylococcus aureus</i> | 25923 | 50-100            | Luxuriant | >=70 %   | 35-37°C                | 24-48 Hours       |

**PACKAGING:**

In pack size of 100 gm and 500 gm bottles.

**STORAGE**

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

**DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

- Richardson S. D. (Ed.), 1985, Standard Methods for the Examination of Dairy Products, 15th ed., APHA, Washington, D.C.
- Erlanson A. L. and Lawrence C. A., 1953, Science, 118:274.
- Brummer B., 1976, Appl. Environ. Microbiol., 32:80.

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|--|---|---|--|---|
| <br>GMP<br>Good Manufacturing Practices Certified | <br>Best Before                          | <br>QTY.<br>Quantity               | <br>REF<br>Catalogue Number | <br>Manufacturer |
| <br>Temperature Unit                              | <br>LOT/<br>B. NO.<br>Lot / Batch Number | <br>Consults Instructions for Use | <br>QR Code                 |   |

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only  
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