

## TM 829 – PLATE COUNT AGAR W/ BCP

### INTENDED USE

For enumeration of Lactobacilli in milk products.

### PRODUCT SUMMARY AND EXPLANATION

Plate Count Agar with BCP is a slight modification of the medium recommended by APHA for enumeration of Lactobacilli in cultured milk, yoghurt and sour creams. Lactobacilli grow on this medium and form colonies with yellowish peripheries in the depth and on the surface of the medium. Addition of polysorbate 80 and L- cysteine enhanced the growth of lactobacilli on this medium. *Lactobacillus bulgaricus* invariably forms yellowish colonies its detection and determination is easy.

### COMPOSITION

| Ingredients                    | Gms / Ltr |
|--------------------------------|-----------|
| Peptic digest of animal tissue | 5.000     |
| Yeast extract                  | 2.500     |
| Dextrose                       | 1.000     |
| Polysorbate 80 (Tween 80)      | 1.000     |
| L-Cysteine                     | 0.100     |
| Bromo cresol purple            | 0.040     |
| Agar                           | 15.000    |

### PRINCIPLE

This medium consists of Peptic digest of animal tissue that supply nitrogenous and carbonaceous compounds. Yeast extract provides vitamin B complex and dextrose is the fermentable carbohydrate and energy source. Bromocresol purple is a pH indicator. Plate Count Agar can be incubated at 30°C for upto 72 hours for detection of mesophilic organisms. Polysorbate 80 supplies fatty acids required for the metabolism of lactobacilli.

### INSTRUCTION FOR USE

- Dissolve 24.64 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** : Light yellow to light green homogeneous free flowing powder.  
**Appearance of prepared medium** : Purple coloured clear to slightly opalescent gel forms in Petri plates.  
**pH (at 25°C)** : 6.8 ± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation.



| Microorganism                     | ATCC  | Inoculum (CFU/ml) | Growth    | Recovery | Incubation Temperature | Incubation Period |
|-----------------------------------|-------|-------------------|-----------|----------|------------------------|-------------------|
| <i>Streptococcus thermophilus</i> | 14485 | 50-100            | Luxuriant | >=70 %   | 35-37°C                | 18-48 Hours       |
| <i>Lactobacillus bulgaricus</i>   | 11842 | 50-100            | Luxuriant | >=70 %   | 35-37°C                | 18-48 Hours       |
| <i>Lactobacillus lactis</i>       | 19435 | 50-100            | Luxuriant | >=70 %   | 35-37°C                | 18-48 Hours       |
| <i>Lactobacillus acidophilus</i>  | 4356  | 50-100            | Luxuriant | >=70 %   | 35-37°C                | 18-48 Hours       |

**PACKAGING:**

In pack size of 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**

1. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.

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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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