

# MAST® Culture Media and Supplements

## Technical Information Sheet

**Product Code DM 195**



## Plate Count Agar

For the bacteriological examination of food, water, milk and other dairy products.

### 1. Description

MAST Plate Count Agar is a tryptone (tryptic digest of casein) dextrose yeast agar suitable for the enumeration of bacteria in milk and other dairy products. The medium is equivalent to the Standard Methods Agar

recommended by the American Public Health Association (APHA 1972)<sup>1</sup> for the bacteriological examination of dairy products. It may also be used for testing the hygienic quality of other foods and water.

### 2. Technical Formula\*

Formula	grams per litre
Tryptone	5.0
Dextrose	1.0
Yeast extract	2.5
Agar	12.0
<b>pH approx.7.0</b>	

### 3. Directions

1. Suspend by swirling 20.5g of powder in 1 litre or the contents of the sachet in the stated volume of distilled or deionised water.
2. Autoclave at 121°C (15 p.s.i.) for 15 minutes.
3. Cool and mix well before preparing pour plates with diluted samples of milk or dairy products.

#### 4. In Use

For each type of material, the procedures recommended by agencies such as the APHA should be closely followed.<sup>1-3</sup>

Generally, 1ml samples of appropriate dilutions are placed in sterile petri dishes. MAST Plate Count Agar at 45°C is then added to each plate and mixed with the inoculum. Plates are incubated for 48 hours at 32°C in the standard plate count method. However, different incubation temperatures and periods may be chosen for bacteria with other temperature requirements.

#### 5. References

1. American Public Health Association. *Standard Methods for the Examination of Dairy Products* 1972; 13th edition APHA Inc. New York.
2. American Public Health Association. *Recommended Methods for the Microbiological Examination of Foods* 1958; APHA Inc. New York.
3. American Public Health Association. *Standard Methods for the Examination of Water and Wastewater* 1960; 11th: edition APHA Inc. New York.



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\*Formulation may be modified to meet performance criteria

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