

## Plate Count Agar

### DM195

#### Intended Use

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

#### Contents

See pack label.

#### Formulation\*

Material:	Concentration in medium:
Tryptone	5.0 g/litre
Dextrose	1.0 g/litre
Yeast extract	2.5 g/litre
Agar	12.0 g/litre
Final pH: 7.0 ± 0.2	

#### Storage and shelf life

All dehydrated culture media containers should be kept tightly closed and stored in a dry place at 10 to 25°C until the expiry date shown on the pack label.

#### Precautions

For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

#### Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

#### Procedure

1. Refer to pack label for quantities and volumes required. Prepare MAST® Plate Count Agar (DM195D) by suspending the powder in distilled or deionised water. For sachet packs, dissolve the entire contents of the sachet in the volume shown on the label.
2. Autoclave at 121°C (15 p.s.i.) for 15 minutes.
3. Cool to 45 to 50°C and mix well before preparing pour plates (10 to 12ml per plate) with serially diluted samples of milk or other products.
4. Incubate plates aerobically for 48 hours at 31 to 33°C (or alternative temperatures according to the methodology followed).

#### Interpretation of results

After incubation count all colonies (use plates yielding counts of between 30 and 300 colonies) and after allowing for dilution factors calculate the number of colony forming units (CFU) per ml of original sample.

#### Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate expected performance. Do not use the product if the result with the control organism is incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
<i>Escherichia coli</i> ATCC® 25922	Growth
<i>Staphylococcus epidermidis</i> ATCC® 14990	Growth

#### References

Bibliography available on request.