

Nutrient Agar

DM179

Intended Use

A general purpose growth medium.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone	6.0 g/litre
Beef extract	1.0 g/litre
Yeast extract	2.0 g/litre
Sodium chloride	5.0 g/litre
Agar	14.0 g/litre
Final pH: 7.3 ± 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® Nutrient Agar (DM179D) 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 50°C and add 5 to 7% sterile defibrinated horse or sheep blood where required. Heated blood agar (chocolate) can also be prepared. Alternative growth supplements can be used.
4. If required the medium can be made selective by the addition of various MAST® selective supplements.
5. Pour culture plates (15 to 20ml per plate) and allow to set.
6. Prepared culture plates may be used immediately or stored in plastic bags at 2 to 8°C for up to one week before use.

7. Inoculate plates by surface plating, streaking out for single colonies.
8. Incubate plates aerobically for 18 to 24 hours and anaerobically for up to 72 hours at 35 to 37°C (or alternative temperatures according to the methodology followed).

Interpretation of results

After incubation record growth of organisms. Typical characteristics to note include: colony size and morphology, pigmentation, and haemolysis on blood containing medium.

For the growth of fastidious organisms use of a more nutritious medium, such as MAST® Columbia Agar (DM115D), Blood Agar Base (DM100D) or Blood Agar Base Special (DM101D) is recommended.

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>Streptococcus pyogenes</i> ATCC® 19615	Growth, β-haemolysis
<i>Pseudomonas aeruginosa</i> ATCC® 27853	Growth, pigmentation
<i>Staphylococcus aureus</i> ATCC® 25923	Growth

References

Bibliography available on request.