

Anaerobe Isolation Agar (AIA)

DM630

Intended use

A general purpose medium for the isolation of fastidious anaerobes.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone mixture	23.0g/litre
Yeast extract	5.0g/litre
Soluble starch	3.0g/litre
Glucose	0.5g/litre
Di potassium phosphate	10.0g/litre
Monopotassium phosphate	1.0g/litre
Magnesium phosphate	1.0g/litre
Sodium chloride	0.2g/litre
Manganese sulphate	0.01g/litre
Cysteine hydrochloride	0.06g/litre
Ferrous sulphate	0.01g/litre
Tween 80	0.5g/litre
Agar	15.0g/litre
Final pH: 7.2 ± 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® Anaerobe Isolation Agar (AIA) (DM630D) 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 to 55°C and hold at this temperature in a water bath. Add 5 to 7% sterile defibrinated horse or sheep blood where required.
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 directly with skin swabs or swabs from mucous membranes. Streak out for single colonies.
8. Incubate plates anaerobically for 24 to 72 hours at 35 to 37°C. Plates incorporating selective supplements generally require extended incubation and should be used with a parallel non-selective medium.

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.

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>Clostridium sporogenes</i> ATCC® 19404	Growth
<i>Bacteroides fragilis</i> ATCC® 25285	Growth

References

Bibliography available on request.