

Mueller Hinton Broth

DM171

Intended Use

A standardised liquid medium for susceptibility testing.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Casein hydrolysate, acidic	17.5g/litre
Starch	1.5g/litre
Heart extract paste	5.0g/litre
Final pH: 7.4 ± 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® Mueller Hinton Broth (DM171D) 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. If required cool to 50 to 55°C and hold at this temperature in a water bath and add antibiotics (MAST® ADATAB) for dilution susceptibility test methods.
4. If required add 5 to 7% sterile defibrinated blood to enhance the growth of fastidious organisms. Alternative growth supplements can be used.
5. Dispense into microdilution trays or microdilution tubes as described by CLSI® (Clinical and Laboratory Standards Institute).
6. Antimicrobial Susceptibility Testing should be performed in accordance with standards set down by regulatory bodies such as CLSI®.

Interpretation of results

After incubation record growth of organisms, (indicated by turbidity in the medium) to give a Minimum Inhibitory Concentration (MIC) result. Interpret results as sensitive, intermediate or resistant according to the criteria laid down in the method of use.

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	
<i>Enterococcus faecalis</i> ATCC® 29212	Growth and correct susceptibility pattern
<i>Escherichia coli</i> ATCC® 25922	Growth and correct susceptibility pattern
<i>Pseudomonas aeruginosa</i> ATCC® 27853	Growth and correct susceptibility pattern
<i>Staphylococcus aureus</i> ATCC® 25923	Growth and correct susceptibility pattern

References

Bibliography available on request.