

Violet Red Bile (Lactose) Agar

DM480

Intended use

A selective and differential medium for the detection and enumeration of coliforms in dairy products and processing equipment.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone	7.0 g/litre
Yeast Extract	3.0 g/litre
Lactose	10.0 g/litre
Sodium chloride	5.0 g/litre
Bile salts	1.2 g/litre
Neutral red	0.03 g/litre
Crystal violet	0.002 g/litre
Agar	12.0 g/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® Violet Red Bile (Lactose) Agar (DM480D) 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. Sterilise the medium by boiling until the agar is dissolved. DO NOT AUTOCLAVE.
3. Cool to 45 to 50°C and mix well. Prepare sample dilutions to include one which will yield between 100 and 200 colonies from a 1ml aliquot.

4. Transfer duplicate 1ml aliquots to Petri dishes and add 15ml of MAST® Violet Red Bile (Lactose) Agar cooled to 47°C.
5. Gently swirl the plates 3 times clockwise and 3 times anticlockwise to evenly distribute the sample.
6. Allow plates to set and overlay with an additional 10ml of MAST® Violet Red Bile (Lactose) Agar cooled to approximately 47°C.
7. Incubate at 35 to 37°C or alternative temperature for 18 to 24 hours.

Interpretation of results

After incubation examine plates for evidence of growth. *Enterobacteriales* may be recognised as red colonies surrounded by a similarly coloured zone or halo. 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>Salmonella typhimurium</i> ATCC® 14028	Growth
<i>Staphylococcus aureus</i> ATCC® 25923	No Growth

References

Bibliography available on request.