

Modified Tryptone Soy Broth

DM622

Intended use

A selective enrichment broth for the recovery of *Escherichia coli* O157:H7 from food or faecal samples.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Casein hydrolysate	17.0g/litre
Soy peptone	3.0g/litre
D-Glucose	2.5g/litre
Sodium chloride	5.0g/litre
Di-Potassium hydrogen phosphate	4.0g/litre
Bile Salts No.3	1.5g/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 Modified Tryptone Soy Broth (DM622) 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. Dispense into suitable containers and autoclave at 121°C (15 p.s.i.) for 15 minutes.
3. Cool to 50°C and add Novobiocin MAST® SELECTATAB (MS30) or Novobiocin MAST® SELECTAVIAL (SV30) to make the medium selective.
4. Prepared medium may be used immediately or stored at 2 to 8°C for up to one week before use.

5. For food testing, prepare a 10⁻¹ homogenate of food sample using either a stomacher or blender, by homogenising 25g of sample in 225ml of broth. Incubate at 42°C for 22 hours, preferably with agitation. If immunomagnetic separation techniques are used the broth should be processed after 6 hours incubation.
6. For faecal samples inoculate approximately 0.5g of faeces into 10ml of prepared broth. Incubate at 37°C for 18 to 22 hours.
7. After incubation subculture onto plates of CT-SMAC medium (MAST® DM491D/SV48/SV49).
8. Incubate CT-SMAC plates at 37°C for 24 hours and examine for the presence of non sorbitol fermenting colonies.
9. Subculture five suspect colonies (or all visible colonies if fewer than five) onto plates of MAST® MacConkey agar (DM140D) and confirm the serotype of gram negative lactose fermenting bacilli with suitable antisera (MAST® ASSURE product M12030 for *E.coli* O157:H7). Consult Reference Lab for confirmation.

Interpretation of results

After incubation record growth of organisms, indicated by turbidity in the medium and proceed as detailed above or as instructed 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	Result
<i>Enterococcus faecalis</i> ATCC® 29212	No growth
<i>Escherichia coli</i> O157:H7 ATCC® 35150	Growth

References

Bibliography available on request.