

Tetrathionate Broth Base

DM219S

Intended Use

A selective liquid enrichment medium for *Salmonellae*.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone	5.0 g/litre
Bile salts	1.0 g/litre
Calcium carbonate	10.0 g/litre
Sodium thiosulphate	30.0 g/litre
Final pH: 8.2 ± 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® Tetrathionate Broth (DM219S) 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. Boil the suspension, cool to below 45°C and add 20ml of iodine solution.

Iodine solution

Iodine	6g
Potassium iodide	5g
Distilled water	20ml

3. Mix well and distribute 10ml amounts in test tubes.
4. After the addition of iodine the medium should be used on the same day. The base only will keep for several weeks at 2 to 8°C.

5. Add one part of sample suspension or inoculated pre-enrichment medium to 9 parts of MAST® Tetrathionate Broth, DM219S.
6. Incubate for 12 to 24 hours at 35 to 37°C then use to inoculate plates of differential culture media (MAST® Desoxycholate Citrate Agar DM130, MAST® XLD Agar DM230 etc).

Interpretation of results

After incubation record growth of organisms, indicated by turbidity in the 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>Salmonella typhimurium</i> ATCC® 14028	Growth
<i>Escherichia coli</i> ATCC® 25922	Inhibition

References

Bibliography available on request.