

## Buffered Peptone Water

### DM494

#### Intended use

A medium for pre-enrichment of sub-lethally injured *Salmonella* spp. and selective enrichment of *E. coli* O157:H7.

#### Contents

See pack label.

#### Formulation\*

Material:	Concentration in medium:
Peptone mixture	10.0 g/litre
Sodium chloride	5.0 g/litre
Di-Sodium hydrogen phosphate	3.5 g/litre
Potassium di-hydrogen phosphate	1.5 g/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® Buffered Peptone Water (DM494D) 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. Distribute the solution into suitable final containers.
3. Autoclave at 121°C (15p.s.i.) for 15 minutes.
4. For use in methods for enrichment of *E. coli* O157:H7, cool to 50 to 55°C and add MAST® SELECTAVIAL (SV55) as specified.
5. For use in methods for pre-enrichment of salmonellae no additions to the medium are necessary.
6. Cool to ambient temperature.
7. Add 25g or 25ml of food or environmental samples to 225ml of prepared medium and homogenise.

8. For pre-enrichment of salmonellae: Incubate at 37°C for 18 to 20 hours. Transfer 0.1ml to 10ml of MAST® Buffered Rappaport Vassiliadis Broth (DM269D) and continue incubation and subculture according to the methodology followed for recovery and identification of salmonellae.
9. For selective enrichment of *E. coli* O157:H7: Incubate at 35 to 37°C for a maximum of 24 hours. Subculture onto plates of CT-SMAC (MAST® SV48/SV49 and DM491D) after 6 hours and at between 20 and 24 hours.

#### Interpretation of results

Use of this medium is a single step of a procedure for recovery and identification of pathogenic organisms and no separate interpretation is required. After the final step of the procedure being followed suspect colonies should be confirmed by biochemistry and serology

#### 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> O157:H7 ATCC® 35150	Growth
<i>Salmonella typhimurium</i> ATCC® 14028	Growth

#### References

Bibliography available on request.