

## METHOD STATEMENT

**Determinand:**

Listeria

**Matrix:**

Raw and Potable waters

**Principle of Method:**

This method relies on a selective enrichment step followed by plating onto selective and indicator media. Suspect colonies are subjected identification by MALDI-TOF MS, or morphological and biochemical confirmations.

**Sampling and sample preparation:**

Once taken, microbiological samples should be transferred immediately to dark storage conditions and kept at a temperature between 2 - 8°C for transport to the laboratory. If samples are not analysed immediately on receipt in the laboratory, they should be kept at a temperature between 2 - 8°C, in dark conditions until analysis commences.

Samples should be analysed as soon as practicable on the day of collection. In exceptional circumstances, if there is a delay, storage under the above conditions should not exceed 24 hours before the commencement of analysis.

**Interferences:**

Chlorine and chloramines. Neutralise by adding sodium thiosulphate which at a concentration of 18mg<sup>l</sup><sup>-1</sup> should counteract up to 5mg<sup>l</sup><sup>-1</sup> of free and combined residual chlorine.

Plasticisers can interfere in the mass spectrometry analysis. Only certified, non-plasticising plastic materials should be used.

**Performance of Method:**

Range of Application:	0 - 100 cfu/100ml without dilution
Limit of Detection:	1 cfu/100ml
Normal Reporting Level:	0 cfu/100ml = Not Detected

**References:**

British Standards Institution. BS 4285. Microbiological examination for dairy purposes. Section 3.15. Detection of *Listeria monocytogenes*. London: BSI, 1993.

The Microbiology of Drinking Water (2002) – Part 2 – Practices and procedures for sampling

Microbiological Methods. C H Collins, P M Lyne, J M Grange. Sixth Edition 1989.

