

METHOD STATEMENT



Determinand:

Pseudomonas Spp

Matrix:

Sample Type: Waters.

Principle of Method:

A known volume of the water sample is filtered through a membrane filter with 0.45µm pores upon which the bacteria are entrapped. The filter is then placed on selective growth medium Pseudomonas agar supplemented with C-F-C and incubated at 30°C for 48 hours after which colonies characteristic of Pseudomonas spp. are counted, and then confirmed by a positive Oxidase reaction.

As an alternative to confirmation, colonies may be identified directly using a MALDI-TOF MS system to conduct protein profiling

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.

Where an exceedance has occurred the customer should be informed or a statement reflecting this should be included with the report (except where the customer has been already made aware that this is occurring on a regular basis and requests this not to be applied).

Interferences

Chlorine and chloramines. Neutralise by adding sodium thiosulphate which at a concentration of 18 mg/L should counteract up to 5 mg/L of free and combined residual chlorine.

Performance of Method:

Limit of Detection:

The Limit of Detection for this method is calculated as detailed in internal Procedure GOP7.2B.

Uncertainty of measurement:

The Uncertainty of Measurement for this method is calculated as detailed in internal Procedure GOP7.6C and the results are recorded on GQF7.6.3.

References:

DoE (Department of the Environment) (1994) The Microbiology of Water 1994 Part 1 - Drinking Water. Report on Public Health and Medical Subjects No 71. Methods for the Examination of Waters and Related Materials. Department of the Environment, HMSO, London.

Practical Food Microbiology PHLS Publication Ed. Roberts, Hooper and Greenwood (1995).

Collins and Lyne's Microbiological Methods. Sixth Edition 1989. Page 133, Membrane Filter Counts.

Environment Agency - The Microbiology of Drinking Water (2002) - Part 2 - Practices and Procedures for Sampling.

BBL Dryslide Oxidase Manufacturers Instructions Ref. L-000/46, Revised May 1999.