

# Australian Standard®

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## Water microbiology

### Method 7: Thermotolerant coliforms and *Escherichia coli*—Membrane filtration method

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#### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee on Water Microbiology, FT/20, as part of a series of methods for the microbiological examination of waters for domestic and industrial use.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

The method set out in this Standard replaces a method previously given in AS 1095.4.1.6—1981, *Microbiological methods for the dairy industry—Methods for the examination of water and air—Microbiological examination of water—Escherichia coli by membrane filtration*.

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#### METHOD

**1 SCOPE** This Standard sets out a method, using membrane filtration, for enumerating thermotolerant coliforms and *Escherichia coli* in water.

##### NOTES:

- 1 Thermotolerant coliforms are often also referred to as 'faecal coliforms' although the organisms may not be of faecal origin.
- 2 Membrane filtration is suitable for enumerating microorganisms only when the turbidity of the water is low.
- 3 Bacterial counts derived from membranes with fewer than 20 or more than 80 thermotolerant coliform colonies are approximate.
- 4 A flow diagram of the procedure is shown in Appendix A.

**2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard:

##### AS

- 4276 Water microbiology
- 4276.1 Method 1: General information and procedures
- 4276.2 Method 2: Culture media, diluents and reagents

**3 CULTURE MEDIA AND REAGENT** (see AS 4276.2)

- 3.1 Membrane lauryl sulfate (MLS) agar**
- 3.2 Membrane lauryl sulfate (MLS) broth**
- 3.3 EC broth**