Australian Standard®

Water microbiology

Method 5: Coliforms—Membrane filtration method

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 1095.4.1.5—1981, *Microbiological methods for the dairy industry—Methods for the examination of water and air—Microbiological examination of water—Coliforms by membrane filtration.*

METHOD

1 SCOPE This Standard sets out a method, using membrane filtration, for enumerating coliforms in water.

NOTES:

1 Membrane filtration is suitable for enumerating microorganisms only when the turbidity of the water is low.

2 The membrane filtration method is not suitable for waters containing only small numbers of coliforms in the presence of many other species that are capable of growth on the medium used.

3 Bacterial counts derived from membranes with fewer than 20 or more than 80 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 Lactose peptone (LP) water