Australian Standard®

Water microbiology

Method 4: Coliforms—Estimation of most probable number (MPN)

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 1095.4.1.3—1981, *Microbiological methods for the dairy industry—Methods for the examination of water and air—Microbiological examination of water—Coliforms by multiple tube dilution.*

METHOD

1 SCOPE This Standard sets out a method, using a multiple tube dilution technique, for estimating the most probable number (MPN) of coliforms in water.

NOTE: 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 Improved formate lactose glutamate (IFLG) medium

3.2 Eosin methylene blue (EMB) agar

3.3 Lactose peptone (LP) water

3.4 Nutrient agar

3.5 Oxidase reagent (Kovacs')

4 APPARATUS

4.1 Rimless bacteriological test tubes—of appropriate size, with suitable fermentation tubes.