

Australian Standard[®]

Water microbiology

Method 2: Culture media, diluents and reagents

PREFACE

This Standard was prepared by the 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 Standard provides, in part, information previously given in AS 1095.4.1.1—1981, *Microbiological methods for the dairy industry—Methods for the examination of water and air—Microbiological examination of water—Scope and general requirements*.

The formulae of the media, diluents and reagents set out in this Standard have been drawn from many sources and where possible a literature reference is given to provide more detailed information about each medium and its use.

METHOD

1 SCOPE This Standard sets out the formulations, procedures and precautions to be followed for the preparation of the culture media, diluents and reagents specified in this series of standard methods for the microbiological examination of water.

2 REFERENCED DOCUMENT The following document is referred to in this Standard:

AS

2243 Safety in laboratories (all Parts)

3 HAZARDOUS CHEMICALS Many chemicals are hazardous and care shall be taken when handling all chemicals used to make up culture media, diluents and reagents. Safety precautions and practices as detailed in AS 2243 shall be observed at all times.

4 REQUIREMENTS FOR INGREDIENTS

4.1 Agar

4.1.1 Description Agar for microbiological purposes shall be prepared especially for this use and shall be identified as bacteriological agar. Such agar, when used at an appropriate concentration in media, shall give satisfactory biological performance and shall not cause significant inhibition to the growth of microorganisms. Information on the gel strength, maximum moisture content and maximum inorganic matter content expressed as ash shall be available from the manufacturer.