

AS/NZS 4020:2002

AS/NZS 4020

Australian/New Zealand Standard™

**Testing of products for use in contact
with drinking water**

AS/NZS 4020:2002

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CH-034, Materials in Contact with Drinking Water. It was approved on behalf of the Council of Standards Australia on 14 October 2002 and on behalf of the Council of Standards New Zealand on 15 October 2002. It was published on 7 November 2002.

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Australian Electrical and Electronic Manufacturers Association
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Testing of products for use in contact with drinking water

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CH-034, Materials in Contact with Drinking Water, to supersede AS/NZS 4020:1999, *Products for use in contact with drinking water*.

In preparing this Standard, consideration has been given to comparable overseas Standards, to minimize duplication of effort and to maintain commonality, wherever reasonable, with those Standards. Particular consideration has been given to the various parts of BS 6920, *Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water*. Several of the test procedures and criteria given in BS 6920 have been adopted or modified for Australian and New Zealand requirements.

This Standard departs from BS 6920 as follows:

- (a) This Standard provides a method of testing for the leaching of compounds that may produce a mutagenic effect.
- (b) The requirement for products to be tested at surface area-to-volume ratios that are not less than those in the intended end-use exposure (with the exception of the test for growth of aquatic micro-organisms). Where there is a difference between test and end-use exposures, provision is made for a scaling factor to be applied to the test result.
- (c) The inclusion of testing for metals extracted from metal products that are often components of products in contact with drinking water.

Significant changes from the previous edition include the following:

- (i) Inclusion of an appendix for the testing of hot water devices having varying duty cycles.
- (ii) Modification of the definition of 'drinking water'.
- (iii) Deference to the product Standard for important decisions regarding scaling factors and the use of simulated samples.
- (iv) Revision of the manner in which scaling factors are applied.
- (v) Modification of the test for mutagenic activity to remove the procedure for concentrating the extract.
- (vi) Application of the end-of-line extraction procedure to tests other than metals extraction.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendices to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is for information and guidance only.

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