Australian/New Zealand Standard[™]

Testing of products for use in contact with drinking water





AS/NZS 4020:2005

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 20 October 2005 and on behalf of the Council of Standards New Zealand on 4 November 2005. This Standard was published on 29 November 2005.

The following are represented on Committee CH-034:

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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 4020:2002, *Testing of 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 a colorimetric method for determination of cytotoxic activity.
- (ii) Inclusion of an appendix on the structure of test reports.
- (iii) Revision of the appendix on product submission information.
- (iv) Altered requirements for testing non-metallic products for leaching of metals.

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.

CONTENTS

Page

FOREWORD		
1	SCOPE	. 5
2	REFERENCED DOCUMENTS	. 5
3	DEFINITIONS	. 6
4	TEST SAMPLES	. 8
5	SCALING FACTORS	. 9
6	TEST REQUIREMENTS	11
7	HOT WATER TESTS	14

APPENDICES

А	SAMPLE PREPARATION	15
В	SCALING FACTORS—DERIVATION AND APPLICATION	21
С	TEST METHOD—TASTE OF WATER EXTRACT	26
D	TEST METHOD—APPEARANCE OF WATER EXTRACT	32
E	TEST METHOD—GROWTH OF AQUATIC MICRO-ORGANISMS	35
F	TEST METHOD—CYTOTOXIC ACTIVITY OF WATER EXTRACT	42
G	TEST METHOD—MUTAGENIC ACTIVITY OF WATER EXTRACT	51
Н	TEST METHOD—EXTRACTION OF METALS	55
Ι	TEST METHOD—EXTRACTION PROCEDURES FOR END-OF-LINE	
	FITTINGS	59
J	HIGH TEMPERATURE TESTS	64
Κ	TEST METHOD—SAMPLE EXTRACTION PROCEDURE FOR USE WITH	
	WATER-HEATING SYSTEMS	66
L	PRODUCT SUBMISSION INFORMATION	
М	SIMULATED SAMPLES	74
Ν	TEST REPORT	76



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