

Australian/New Zealand Standard™

**Methods for sampling and analysing
timber preservatives and preservative-
treated timber**

**Part 3: Analysis methods for
determination of preservative retention**



AS/NZS 1605.3:2018

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee TM-012, Timber Grading and Preservation. It was approved on behalf of the Council of Standards Australia on 22 December 2017 and by the New Zealand Standards Approval Board on 5 March 2018. This Standard was published on 22 March 2018.

The following are represented on Committee TM-012:

Australian and New Zealand Timber Preservative Manufacturers Association
Australian Forest Products Association
Australian Pesticides and Veterinary Medicines Authority
Australian Timber Flooring Association
Australian Timber Importers Federation
Building Research Association of New Zealand
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This Standard was issued in draft form for comment as DR AS/NZS 1605.3:2017.

Australian/New Zealand Standard™

Methods for sampling and analysing timber preservatives and preservative- treated timber

Part 3: Analysis methods for determination of preservative retention

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AS/NZS 1605:2000 revised and redesignated, in part, AS/NZS 1605.3:2006.
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TM-012, Timber Grading and Preservation, to supersede AS/NZS 1605.3:2006.

The objective of this revision is to add analytical procedures to determine—

- (a) triadimefon and cyproconazole in glueline-treated and surface-treated timber;
- (b) quaternary ammonium compound in wood treated with ACQ preservatives;
- (c) didecyldimethyl ammonium chloride in wood treated with ACQ preservatives;
- (d) zinc borate in reconstituted wood products;
- (e) thiacloprid in glueline-treated plywood and laminated veneer lumber (LVL); and
- (f) deltamethrin in glueline-treated engineered wood products.

The objective of this Standard is to set out methods for the sampling and analysing of preservative treated timber.

AS/NZS

- 1605 Methods for sampling and analysing timber preservatives and preservative-treated timber
- 1605.1 Part 1: General requirements, sampling, and determination of sapwood and heartwood presence
- 1605.2 Part 2: Determination of preservative penetration by spot tests
- 1605.3 Part 3: Analysis methods for determination of preservative retention (this Standard)
- 1605.4 Part 4: Analysis methods for determination of preservative solution concentration

This Standard is intended to be read in conjunction with AS/NZS 1605.1 and the AS/NZS 1604 series, NZS 3640 or the relevant Standard to which timber is claimed to have been treated. The preservatives incorporated in the AS/NZS 1604 series are required to be accompanied by analytical methods for their determination, which are incorporated in the AS/NZS 1605 series.

CONTENTS

| | <i>Page</i> |
|---|-------------|
| SECTION 1 SCOPE AND GENERAL | |
| 1.1 SCOPE..... | 7 |
| 1.2 APPLICATION | 7 |
| 1.3 REFERENCED DOCUMENTS..... | 7 |
| 1.4 DEFINITIONS..... | 7 |
| 1.5 PREPARATION OF TEST PIECES FROM TEST SPECIMEN..... | 8 |
| 1.6 RELATED METHODS OF ANALYSIS | 8 |
| SECTION 2 DETERMINATION OF COPPER, CHROMIUM AND ARSENIC IN PRESERVATIVE-TREATED TIMBER | |
| 2.1 PRINCIPLE..... | 9 |
| 2.2 REAGENTS | 9 |
| 2.3 PROCEDURE..... | 9 |
| 2.4 CALCULATIONS OF THE PERCENTAGES OF METALS IN TREATED TIMBER | 11 |
| 2.5 COMPOSITION OF COPPER CHROMIUM ARSENIC (CCA)..... | 11 |
| SECTION 3 DETERMINATION OF BORON IN PRESERVATIVE-TREATED TIMBER | |
| 3.1 PRINCIPLE | 12 |
| 3.2 REAGENTS | 12 |
| 3.3 PROCEDURE FOR ANALYSIS OF TREATED TIMBER..... | 12 |
| 3.4 CALCULATIONS | 13 |
| SECTION 4 DETERMINATION OF FLUORIDE IN PRESERVATIVE-TREATED TIMBER | |
| 4.1 PRINCIPLE..... | 14 |
| 4.2 REAGENTS | 14 |
| 4.3 PROCEDURE..... | 14 |
| 4.4 CALCULATIONS | 15 |
| SECTION 5 DETERMINATION OF PENTACHLOROPHENOL (PCP) IN PRESERVATIVE-TREATED TIMBER | |
| 5.1 PRINCIPLE..... | 16 |
| 5.2 REAGENTS | 16 |
| 5.3 PROCEDURE..... | 16 |
| 5.4 CALCULATIONS | 17 |
| SECTION 6 DETERMINATION OF CREOSOTE OR PIGMENT-EMULSIFIED CREOSOTE IN PRESERVATIVE-TREATED TIMBER | |
| 6.1 PRINCIPLE..... | 18 |
| 6.2 REAGENT—TOLUENE..... | 18 |
| 6.3 PROCEDURE..... | 18 |
| 6.4 CALCULATIONS | 20 |
| 6.5 CORRECTION..... | 20 |

| | |
|---|---|
| SECTION 7 DETERMINATION OF ORGANO TIN OXIDE (TBTO) IN PRESERVATIVE-TREATED TIMBER | |
| 7.1 | PRINCIPLE 21 |
| 7.2 | REAGENTS 21 |
| 7.3 | PROCEDURE..... 21 |
| 7.4 | CALCULATIONS 22 |
| SECTION 8 DETERMINATION OF ORGANO TIN IN TRI-(n-BUTYL)TIN NAPHTHENATE (TBTN) IN PRESERVATIVE-TREATED TIMBER | |
| 8.1 | GENERAL..... 23 |
| 8.2 | PRINCIPLE 23 |
| 8.3 | METHOD CHARACTERISTICS..... 23 |
| 8.4 | REAGENTS 23 |
| 8.5 | APPARATUS 24 |
| 8.6 | PROCEDURE..... 24 |
| 8.7 | CALCULATION OF RESULTS 25 |
| SECTION 9 DETERMINATION OF TOTAL TIN IN TRI-(n-BUTYL)TIN NAPHTHENATE (TBTN) IN PRESERVATIVE-TREATED TIMBER | |
| 9.1 | PRINCIPLE 26 |
| 9.2 | REAGENTS 26 |
| 9.3 | PROCEDURE..... 26 |
| 9.4 | CALCULATIONS 27 |
| SECTION 10 DETERMINATION OF ORGANOCHLORINE INSECTICIDES IN PRESERVATIVE-TREATED TIMBER | |
| 10.1 | PRINCIPLE 28 |
| 10.2 | REAGENTS 28 |
| 10.3 | PROCEDURE..... 28 |
| 10.4 | CALCULATION 30 |
| SECTION 11 DETERMINATION OF COPPER IN COPPER NAPHTHENATE IN PRESERVATIVE-TREATED TIMBER | |
| 11.1 | PRINCIPLE 31 |
| 11.2 | REAGENTS 31 |
| 11.3 | PROCEDURE..... 31 |
| 11.4 | CALCULATIONS 32 |
| SECTION 12 DETERMINATION OF COPPER IN ALKALINE COPPER QUATERNARY (ACQ) PRESERVATIVE-TREATED TIMBER | |
| 12.1 | PRINCIPLE 33 |
| 12.2 | REAGENTS 33 |
| 12.3 | PROCEDURE..... 33 |
| 12.4 | CALCULATIONS 34 |
| 12.5 | COMPOSITION OF ALKALINE COPPER QUATERNARY (ACQ)..... 34 |
| SECTION 13 DETERMINATION OF BIFENTHRIN IN PRESERVATIVE-TREATED TIMBER | |
| 13.1 | PRINCIPLE 35 |
| 13.2 | REAGENTS 35 |
| 13.3 | SAMPLING 35 |
| 13.4 | PROCEDURE..... 35 |
| 13.5 | DATA HANDLING AND CALCULATIONS 37 |

| | <i>Page</i> |
|--|-------------|
| SECTION 14 DETERMINATION OF BIFENTHRIN IN GLUELINE-TREATED TIMBER | |
| 14.1 PRINCIPLE | 38 |
| 14.2 REAGENTS | 38 |
| 14.3 SAMPLING..... | 38 |
| 14.4 PROCEDURE..... | 38 |
| 14.5 PREPARATION OF STANDARDS..... | 40 |
| 14.6 DATA HANDLING AND CALCULATIONS | 40 |
| SECTION 15 DETERMINATION OF TEBUCONAZOLE AND PROPICONAZOLE IN PRESERVATIVE-TREATED TIMBER BY GAS CHROMATOGRAPHY (GC) | |
| 15.1 PRINCIPLE | 41 |
| 15.2 REAGENTS | 41 |
| 15.3 SAMPLING..... | 41 |
| 15.4 PROCEDURE..... | 41 |
| 15.5 STANDARD SOLUTIONS | 42 |
| 15.6 STANDARDIZATION..... | 43 |
| 15.7 CALCULATIONS | 43 |
| SECTION 16 DETERMINATION OF PERMETHRIN IN TIMBER EXTRACTS—HPLC ANALYSIS | |
| 16.1 GENERAL..... | 45 |
| 16.2 PRINCIPLE | 45 |
| 16.3 REAGENTS | 45 |
| 16.4 APPARATUS | 46 |
| 16.5 SAMPLING..... | 46 |
| 16.6 PROCEDURE..... | 46 |
| 16.7 DATA HANDLING AND CALCULATIONS | 48 |
| SECTION 17 DETERMINATION OF IMIDACLOPRID IN TIMBER EXTRACTS—HPLC ANALYSIS | |
| 17.1 PRINCIPLE | 49 |
| 17.2 REAGENTS | 49 |
| 17.3 SAMPLING AND MOISTURE CONTENT..... | 49 |
| 17.4 PROCEDURE..... | 49 |
| 17.5 CALCULATIONS | 51 |
| SECTION 18 DETERMINATION OF IMIDACLOPRID IN GLUELINE-TREATED TIMBER—ELISA ANALYSIS | |
| 18.1 PRINCIPLE | 52 |
| 18.2 REAGENTS AND APPARATUS..... | 52 |
| 18.3 SAMPLING AND MOISTURE CONTENT..... | 52 |
| 18.4 PROCEDURE..... | 52 |
| 18.5 CALCULATIONS | 54 |

| | |
|---|----|
| SECTION 19 DETERMINATION OF TRIADIMEFON AND CYPROCONAZOLE IN GLUELINE-TREATED AND SURFACE TREATED TIMBER | |
| 19.1 PRINCIPLE | 55 |
| 19.2 REAGENTS | 55 |
| 19.3 SAMPLING AND MOISTURE CONTENT..... | 55 |
| 19.4 PROCEDURE..... | 55 |
| 19.5 STANDARD SOLUTIONS | 56 |
| 19.6 QUANTITATION | 56 |
| 19.7 CHROMATOGRAPHY..... | 56 |
| 19.8 CALCULATIONS | 57 |
| SECTION 20 DETERMINATION OF THIACTOPRID IN GLUELINE-TREATED TIMBER—ELISA ANALYSIS | |
| 20.1 PRINCIPLE | 59 |
| 20.2 REAGENTS AND APPARATUS..... | 59 |
| 20.3 SAMPLING AND MOISTURE CONTENT..... | 59 |
| 20.4 PROCEDURE..... | 59 |
| 20.5 CALCULATIONS | 61 |
| SECTION 21 DETERMINATION OF QUATERNARY AMMONIUM COMPOUND IN WOOD TREATED WITH ACQ PRESERVATIVES | |
| 21.1 PRINCIPLE | 62 |
| 21.2 REAGENTS | 62 |
| 21.3 SAMPLING..... | 62 |
| 21.4 PROCEDURE..... | 62 |
| 21.5 CALCULATION OF QUATERNARY AMMONIUM COMPOUND RETENTION... | 63 |
| SECTION 22 DETERMINATION OF DIDECYLDIMETHYL AMMONIUM CHLORIDE IN WOOD TREATED WITH ACQ PRESERVATIVES | |
| 22.1 PRINCIPLE | 64 |
| 22.2 REAGENTS | 64 |
| 22.3 SAMPLING..... | 64 |
| 22.4 CALIBRATION | 64 |
| 22.5 SAMPLE ANALYSIS | 65 |
| 22.6 CALCULATION OF DDAC CONCENTRATION | 65 |
| SECTION 23 DETERMINATION OF DELTAMETHRIN IN PRESERVATIVE-TREATED TIMBER | |
| 23.1 PRINCIPLE | 66 |
| 23.2 REAGENTS | 66 |
| 23.3 APPARATUS | 66 |
| 23.4 SAMPLING..... | 67 |
| 23.5 PROCEDURE..... | 67 |
| 23.6 EXTRACTION | 67 |
| 23.7 DATA HANDLING AND COLLECTION..... | 68 |
| 23.8 GC CONFIGURATION | 69 |

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Methods for sampling and analysing timber preservatives and preservative-treated timber**

Part 3: Analysis methods for determination of preservative retention

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies analysis methods for determining preservative retention in preservative-treated wood products. The calculations necessary for determining compliance with the requirements specified in the AS/NZS 1604 series and NZS 3640 are outlined.

1.2 APPLICATION

This Standard should be read in conjunction with—

- (a) the AS/NZS 1604 series, NZS 3640 or the relevant Standard to which timber is claimed to have been treated; and
- (b) AS/NZS 1605.1.

Methods for sampling and analysing timber preservatives and preservative-treated timber are categorized into the following parts of the AS/NZS 1605 series, according to the general nature of the tests:

- (i) Sampling preservative liquids and preservative-treated timber Part 1.
- (ii) Determination of presence of sapwood and heartwood Part 1.
- (iii) Determination of preservative penetration by spot tests Part 2.
- (iv) Analysis of preservative retention Part 3.
- (v) Analysis of preservative solution concentration Part 4.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

- 1604 Specification for preservative treatment (all parts)
- 1605 Methods for sampling and analysing timber preservatives and preservative-treated timber (all parts)
- 1605.1 Part 1: General requirements, sampling, and determination of sapwood and heartwood presence

AS/NZS

- 4491 Timber—Glossary of terms in timber-related Standards

NZS

- 3640 Chemical preservation of round and sawn timber