

Australian/New Zealand Standard™

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

**Part 4: Analysis methods for  
determination of preservative solution  
concentration**



## **AS/NZS 1605.4:2018**

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.

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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  
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*This Standard was issued in draft form for comment as DR AS/NZS 1605.4:2017.*

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# Australian/New Zealand Standard™

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

### Part 4: Analysis methods for determination of preservative solution concentration

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AS 1605—1974 jointly revised and designated AS/NZS 1605:1998.  
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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 1605.4:2006.

The objective of this Standard is to set out methods for sampling and analysing preservative solution concentrations.

This Standard is part of a series of Standards that cover the sampling and analysing of timber preservatives and preservative-treated timber, as follows:

### 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
- 1605.4 Part 4: Analysis methods for determination of preservative solution concentration (this Standard)

This Standard is intended to be read in conjunction with the AS/NZS 1604 series, NZS 3640 or the relevant Standard to which timber is claimed to have been treated, and AS/NZS 1605.1. 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.

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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Methods for sampling and analysing timber preservatives and preservative-treated timber****Part 4: Analysis methods for determination of preservative solution concentration**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies analysis methods for the determination of preservative solution concentration. Analytical procedures for the determination of specific preservative components are given for oil-borne and waterborne preservatives. Calculations are provided for determining compliance with relevant standards, including the AS/NZS 1604 series and NZS 3640.

**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	
2026	Laboratory glassware—Density hydrometers
2163	Laboratory glassware—Measuring cylinders
3529	Solvents—Toluene
5604	Timber—Natural durability ratings
NZS	
3640	Chemical preservation of round and sawn timber