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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

SN/T 2308-2009

**Determination of copper, chromium, arsenic in preservative
solutions and treated wood and wood-based products. Atomic
absorption spectrometric method**

木材防腐剂与防腐处理后木材及其制品中铜、铬和砷的测定 原子吸收光谱法
(English Translation)

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Foreword

This revised standard adopts BS5666-3:1991 "Testing methods of wood preservatives and preservative-treated timber - Part 3. copper, After chromium, arsenic preservative solution and anticorrosive ingredient timber handling quantitative analysis "(in English).

This standard is based on BS5666-3:1991 redrafted.

This standard adopts BS5666-3:1991 has been modified when the main technical differences are as follows.

- a) For the BS5666-3:1991 standard preface made editorial changes;
- b) increase the normative references;
- c) increasing the timber and its method of preparation and determination of moisture content of the sample after the article embalmed;
- d) increasing the lower limit of detection of the elements of this standard;
- e) Remove the colorimetry;
- f) increasing the working conditions of the instrument Appendix A;
- g) The list of standard terms and control the list of British Standards in terms of informative Appendix B.

The Standard Appendix A and Appendix B are informative.

This standard is proposed and managed by the National Certification and Accreditation Administration Committee.

This standard by the People's Republic of China Guangdong CIQ is responsible for drafting.

1 Scope

This standard specifies the atom timber and its products of copper, chromium and arsenic wood preservatives and preservative treatment after absorption spectrometric method.

This standard applies to wood and its products atom of copper, chromium and arsenic wood preservatives and preservative treatment after absorption spectroscopy.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

Preparation of standard solution of GB/T 602 Determination of impurities in chemical reagents Laboratory use specifications and test methods GB/T 6682 Analysis

3 Method summary

After the sample timber wood preservatives and preservative-treated dilute sulfuric acid and hydrogen peroxide mixture treatment, quantitative leaching of copper, chromium and arsenic compounds and filtered and the filtrate was added a solution of sodium by atomic absorption spectrometry determination of copper, chromium and arsenic.

4 Reagents

Unless otherwise indicated, reagents were analytical grade and water of at least reached GB/T 6682 provisions grade 3 purity water or deionized water.

4.1

sulfuric acid ($\rho = 1.84\text{g/mL}$), pure class distinctions.

4.2

Hydrogen peroxide (30% aqueous solution).

4.3

sulfuric acid solution (2.5mol/L). preparation according to GB/T 602 requirements.

4.4

over anhydrous sodium sulfate.

4.5

sodium sulfate solution (30g/L). Weigh 30g of anhydrous sodium sulfate dissolved in water and diluted to 1000mL, shake.

4.6

sulfate (0.5mol/L) - sodium sulfate (3g/L) solution. 200mL sulfuric acid solution (4.3) was added to 100mL solution of sodium (4.5), mix and dilute to 1000mL.

4.7

mixed standard solution (100µg/mL Cu, 100µg/mL Cr and 1000µg/mL As). according to GB/T 602 regulations formulated or Direct use of standard materials permits formulated.

5 Instruments

5.1

atomic absorption spectrometer.

5.2

electronic balance, a sense of the amount of 0.1mg.

5.3

thermostatic shaking water bath.

5.4

planing wood or hollow drill.

5.5

air convection oven.

5.6

metal mesh, pore size 1.0mm.

6.1 Sample preparation Wood preservatives

Wood preservatives Pipette samples directly.