ICS 85.010
CCS Y30

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 12658-2008

Replacing GB/T 12658-1990

Paper, board and pulp - Determination of sodium content

纸、纸板和纸浆中钠含量的测定

Issued on: August 19, 2008 **Implemented on: May 1, 2009**

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Standardization Administration of China

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Foreword

This standard replaces GB/T 12658-1990 "Pulp, paper and paperboard in potassium, sodium content determination." This standard and GB/T 12658-1990 compared to the main changes are as follows:

--- Modify the standard name;

--- Increasing the foreword;

--- Modify the scope (1990 edition Chapter 1; Chapter 1 of this edition);

--- Modify the normative references (1990 Edition Chapter 2; Chapter 2 of this edition);

--- Modified principle (1990 Edition Chapter 3; first edition Chapter 3);

--- Modify the reagent requirements (Edition 1990, Chapter 4; Chapter 4 of this edition);

--- Modify the instrument specifications (1990 edition Chapter 5; Chapter 5 of this edition);

--- Modification and preparation of the sample (1990 edition, Chapter 6; Chapter 6 of this edition);

--- Modify the test procedure, the deletion of the potassium measurement (1990 edition, Chapter 7; Chapter 7 of this edition);

--- Increased quality assurance and control (Chapter 8 of this edition). The standard proposed by China National Light Industry Council. This standard by the National Standardization Technical Committee of the paper industry. This standard was drafted. People's Republic of China SZCIQ, China Pulp and Paper Research Institute. The main drafters of this standard. Xu Rong, Chen Xuhui, Guhao Fei, Chen Xiangyang. This standard replaces the standards previously issued as follows:

--- GB/T 12658-1990. This standard by the National Standardization Technical Committee is responsible for interpreting the paper industry. Paper, board and pulp sodium content

1 Scope

GB/T 12658-2008 is the Chinese national standard on paper, board and pulp - determination of sodium content, in the field of paper technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 19 August 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2009. Classification: ICS 85.010, CCS Y30. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the dry and wet digestion Determination by flame insulation pulp, paper and paper flame emission spectroscopy or atomic absorption spectrometry The sodium content of the plate method. This standard applies to all kinds of insulation pulp, paper and paperboard, this standard also applies to ordinary pulp, paper and board, but try to be based on quantity of sodium Content adjustment. According to the detection limit of the instrument may be used after wet digestion method by flame emission spectrometry, sodium detection limit of 2mg/kg.

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.

GB/T 450 paper and cardboard to take samples and specimens to the vertical and horizontal, positive and negative determination (GB/T 450-2008, ISO 186.2002, MOD)

GB/T 462 paper, board and pulp - Determination of water sample (GB/T 462-2008, ISO 287. 1985, ISO 638. 1978, MOD)

GB/T 740 pulp samples taken (GB/T 740-2003, ISO 7213. 1981, IDT)

GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008,

ISO 3696. 1987, MOD) Principle

3 After ashing a sample, dissolved in hydrochloric acid, after flame atomization, the determination of sodium 588.9nm spectral line emission spectra intensity or sodium 588.9nm Absorbance or emission intensity is proportional to the sodium content in the sample, a standard curve of absorbance line, the resulting comparative quantitative analysis.

4 Reagents

Unless otherwise indicated, used in the analysis confirmed only for the gifted class pure reagents.

4.1 Water, GB/T 6682, Grade 2.

4.2 hydrochloric acid (HCl), rho = 1.18g/mL, mass fraction of 36% to 38%.

4.3 cesium chloride solution (of CsCl, AR, 10g/L), weighed 1.0g of cesium chloride in 100mL beaker, dissolved in water moved 100mL volumetric flask, dilute to the mark, shake, stored in polyethylene plastic bottles. The solution is ionization inhibitor, using atomic absorption Use spectroscopy.

4.4 Sodium standard solution I, rho (Na) = 1000mg/L, accurately weighed spectrum of pure sodium chloride learn from 110 °C drying 2h after 0.2542g in 50mL beaker, dissolved in water and transferred to 100mL volumetric flask, add 5mL hydrochloric acid (4.2), dilute to the mark. store Polyethylene plastic bottle aside.

4.5 Sodium standard solution II, rho (Na) = 50mg/L, with a pipette pipetted 5.0mL standard solution of sodium I (4.4) in 100mL capacity Flask, was added 5mL hydrochloric acid (4.2), diluted with water to the mark.

5 Instruments

Conventional laboratory instruments and

5.1 Muffle furnace. capable of maintaining the temperature at 450 °C ± 25 °C.