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

GB/T 22661.7-2008

**Chemical analysis methods of potassium fluoborate - Part 7:
Determination of sodium content - Flame atomic absorption
spectrometric method**

氟硼酸钾化学分析方法 第7部分：钠含量的测定 火焰原子吸收光谱法

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Method summary
- 4 Reagents
- 6 Sample

Foreword

GB/T 22661 "potassium fluoroborate chemical analysis method" is divided into 10 parts.

- Part 1. Preparation and storage of test samples;
 - Part 2. Determination of the weight of water in the wet method;
 - Part 3. Determination of potassium fluoride boric acid sodium hydroxide volumetric method;
 - Part 4. Determination of magnesium by flame atomic absorption spectrometry;
 - Part 5. Determination of calcium content by flame atomic absorption spectrometry;
 - Part 6. Determination of silicon content - Molybdenum blue spectrophotometric method;
 - Part 7. Determination of sodium content by flame atomic absorption spectrometry;
 - Part 8. Determination of the free boronic acid sodium volumetric method;
 - Part 9. Determination of the chlorine content of mercuric nitrate volumetric method;
 - Part 10. Determination of phosphorus pentoxide content - Molybdenum blue spectrophotometric method. This section GB/T 22661 Part 7. This part is proposed by the China Nonferrous Metals Industry Association. The non-ferrous metal part by the National Standardization Technical Committee. This section is drafted. Fluoride Chemicals Co., Ltd. Participated in the drafting of this section. Hunan Nonferrous fluorine chemical limited liability company, Aluminum Corporation of China Zhengzhou Research Institute, Hengyang City State Friends of Chemical Technology Co., Ltd. The main drafters of this section. Xue Xu Jin, Shi Xiuhua, Li Yongqiang, Guoxian Hui, Wang Hui, Chen Yichun, Zhu Liang, Li Zhijian, Bai Xianghua, Shin Ji flowers, Liu Zhihong Huang Ju in particular, Liu Min.
- Chemical analysis methods of potassium fluoroborate Part 7. Determination of sodium content Flame Atomic Absorption Spectrometry

1 Scope

GB/T 22661.7-2008 is the Chinese national standard on chemical analysis methods of potassium fluoroborate - part 7: determination of sodium content - flame atomic absorption spectrometric method, in the field of metallurgy. 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 29 December 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 November 2009. Classification: ICS 77.120.10, CCS H61. 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 section GB/T 22661 specifies the method for determination of potassium fluoroborate in sodium content. This section applies to the determination of potassium fluoroborate in sodium content. Measuring range. $\leq 0.5\%$.

2 Normative references

The following documents contain provisions which, through reference

GB/T 22661 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 22661.1-2008 Chemical analysis methods of potassium fluoroborate Part 1. Preparation and storage of test samples

3 Method summary

Sample with sulfuric catch fluorine, fuming sulfuric acid heated to take to make hydrochloric acid and dissolved in water after use, in the presence of strontium chloride, atomic absorption spectrometer wavelength 589.6nm at the air - acetylene flame measured sodium content.

4 Reagents

Sulfuric acid 4.1. 1 + 1.

4.2 HCl. 1 + 1. Nitrate 4.3. 1 + 1. Strontium chloride 4.4. 100g/L. Weigh 25.00g strontium

chloride in the beaker, add 150mL water, dissolved by heating and then diluted to 250mL flask, shake, spare.

4.5 Sodium standard stock solution. Weigh accurately 1.2717g previously dried and cooled in the dryer sodium chloride reference $105\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$, Placed in 250mL beaker, add water, dissolved and transferred to 500mL volumetric flask, dilute with water to volume, and mix. This solution containing 1mL 1.0mg sodium.

4.6 Sodium standard solution. Pipette 10.00mL sodium standard stock solution (4.5) in 250mL volumetric flask, dilute with water to volume, and mix. This solution 1mL containing 0.04mg sodium. 5. Apparatus

5.1 platinum dish. flat, diameter 80mm, height 35mm.

5.2 Atomic absorption spectrometer, with a sodium hollow cathode lamp.

6 Sample

The specimen shall comply with GB/T 22661.1 requirements in 3.3.