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

GB/T 26310.2-2010

**Carbonaceous materials used in the production of aluminium --
Calcined coke -- Part 2: Determination of trace elements
content -- Flame atomic absorption spectroscopy**

原铝生产用煅后石油焦检测方法 第2部分：微量元素含量的测定 火焰原子吸收光谱法

(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3 PRINCIPLE OF THE METHOD
4 Reagents

Foreword

GB/T 26310 "primary aluminum production of calcined petroleum coke detection method," a total of five sections.

- Part 1. Determination of density in xylene Pyknometer;
- Part 2. Determination of trace elements by flame atomic absorption spectrometry;
- Part 3. Determination of apparent oil heating;
- Part 4. Determination of oil content by solvent extraction;
- Part 5. Determination of the residual hydrogen content.

This is Part 2 GB/T 26310 of.

This part identical with ISO 8658:1997 "Determination of aluminum production side with carbon material after calcined coke and petroleum coke Trace Elements Flame Atomic Absorption Spectrometry. " This part identical with ISO 8658:1997, the standard for style and consistency of the front Introduction INTRODUCTION deleted, and the precision of the terms listed separately chapter.

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 responsible for drafting units. Aluminum Corporation of China Zhengzhou Research Institute, China Nonferrous Metals Industry Quality Standards and Metrology Institute the study.

Participated in the drafting of this section. Shandong Chenyang Carbon Co., Ltd., Shandong Nanshan Aluminum Co., Ltd., a limited cable-Development the company.

1 Scope

This section GB/T 26310 specifies the method for determination of primary aluminum production Coke Trace Elements Calcined petroleum.

This section applies to an ash content of not greater than the determination of trace elements in petroleum coke after 1% fumed. Measurement range (mass fraction) are shown in Table 1.

Table 1

element

Measuring range /%

no greater than

element

Measuring range /%

no greater than

element

Measuring range /%

no greater than

Calcium Chromium 0.005 0.025 0.025 Copper Magnesium iron 0.030 0.010 0.010 Lead
Nickel 0.050 0.100 0.001 silicon manganese Vanadium Zinc 0.100 0.004 - -

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 26297.6 carbonaceous materials used in aluminum sampling methods - Part 6
calcined petroleum coke (GB/T 26297.6-2010, ISO 6375. 1980, IDT) ISO 385-1. 1984
Laboratory glassware graduated tube - Part 1. General requirements ISO 835-1. 1981
Laboratory glassware graduated pipettes - Part 1. General requirements ISO 1042. 1983
laboratory glassware volumetric flask ISO 3696. 1987 laboratory use - Specification and
test methods

3 PRINCIPLE OF THE METHOD

The sample to be tested is placed in a muffle furnace at 700 °C calcined at 10h, the resulting molten ash using a mixture of boric acid and sodium carbonate, with Dilute

hydrochloric acid to dissolve the melt, the resulting solution Determination of trace elements using atomic absorption spectrometry.

4 Reagents

4.1

anhydrous sodium carbonate (excellent pure).

4.2

borate (excellent pure).