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

GB/T 21932-2008

**Nickel and ferronickel - Determination of sulphur content -
Barium sulfate gravimetric method after alumina
chromatographic separation**

镍和镍铁 硫含量的测定 氧化铝色层分离-硫酸钡重量法

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Foreword

Appendix A of this standard is an informative annex. The standard proposed by China Iron and Steel Association. This standard is under the jurisdiction of Metallurgical Industry Information Standards Institute. This standard drafting of the main unit. Shanxi Taigang Stainless Steel AG. The main drafters of this standard. Daixue Qian, Ren Weiping Liu Wei. Determination of nickel and nickel-iron sulfur content Alumina chromatographic separation - barium sulfate gravimetric method Warning. Use of this standard shall have a person experiences regular lab work. This standard does not point out all possible security issues. Users have the responsibility to take appropriate safety and health practices and to ensure compliance with the conditions relevant national regulations.

1 Scope

GB/T 21932-2008 is the Chinese national standard on nickel and ferronickel - determination of sulphur content - barium sulfate gravimetric method after alumina chromatographic separation, 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 30 May 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 December 2008. Classification: ICS 77.100, CCS H11. 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 alumina chromatographic separation - Determination of sulfur content of barium sulfate gravimetric method. This standard applies to the determination of nickel and nickel-iron sulfur content measurement range (mass fraction). 0.003% to 0.20%.

2 Normative reference standard

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 6379.1 measurement methods and results of Accuracy (trueness and precision) - Part 1. General principles and definitions (GB/T 6379.1- 2004, ISO 5725-1.1994, IDT)

GB/T 6379.2 measurement methods and results of Accuracy (trueness and precision) - Part 2. Determine the standard measurement method to repeat Of the basic methods of reproduction (GB/T 6379.2-2004,

ISO 5725-2.1994, IDT) Principle

3 In the presence of an oxidizing agent potassium chlorate with hydrochloric acid - nitric acid to dissolve the sample, perchloric acid smoke, silicon is removed by filtration, the filtrate through activated alumina color Pillared with a lot of noise separation of elements, eluted with dilute aqueous ammonia colored layer column sulfate, barium sulfate gravimetric method for the determination of sulfur content.

4 Reagents and materials

Analysis, unless otherwise stated, use only reagents of analytical grade and distilled water or equivalent to its purity.

4.1 potassium chlorate, solid.

4.2 anhydrous sodium carbonate, solid, excellent grade.

4.4 hydrofluoric acid, rho1.15g/mL.

4.5 glacial acetic acid, rho1.05g/mL.

4.6 Hydrogen peroxide, rho1.10g/mL.

4.7 perchloric acid, rho1.67g/mL pure class distinctions.

4.8 hydrochloric acid, rho1.19g/mL pure class distinctions.

4.9 nitric acid, rho1.42g/mL pure class distinctions.

4.10 hydrochloric acid, nitric acid, mixed acid, nitric acid in 400mL of water was added 400mL, 200mL of hydrochloric acid, and mix.

4.11 perchloric acid, 1 + 100.

4.12 HCl, 1 + 1.

4.13 HCl, 1 + 20.

4.14 silver nitrate solution, 10g/L.