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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 14506.23-2010

Replacing GB/T 14506.23-1993

Methods for chemical analysis of silicate rocks - Part 23: Determination of chromium content

硅酸盐岩石化学分析方法 第23部分：铬量测定

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Foreword

GB/T 14506 "Methods for chemical analysis of silicate rocks" 30 consists of the following components.

--- Part 1. Determination of water absorption;

--- Part 2. Determination of combined water;

--- Part 3. Determination of the amount of silica;

--- Part 4. Determination of the amount of aluminum oxide;

--- Part 5. Determination of total iron content;

--- Part 6. Determination of calcium oxide content;

--- Part 7. Determination of the amount of magnesium oxide;

--- Part 8. Determination of the amount of titanium dioxide;

--- Part 9. Determination of the amount of phosphorus pentoxide;

--- Part 10. Determination of the amount of manganese oxide;

--- Part 11. Determination of the amount of sodium hydroxide and oxide;

--- Part 12. Determination of the amount of fluorine;

--- Part 13. Determination of sulfur content;

1 Scope

GB/T 14506.23-2010 is the Chinese national standard on methods for chemical analysis of silicate rocks - part 23: determination of chromium content, in the field of mining and minerals. 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 10 November 2010 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 February 2011. Classification: ICS 73.080, CCS D53. 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.

GB/T 14506 provisions of this part of the determination of chromium content in silicate rocks. This section applies to the amount of chromium in the determination of silicate rocks, is also applicable to the measurement of soil and stream sediments chromium content. Measurement range. diphenyl carbon dihydrazide spectrophotometry, 10μg/g ~ 2000μg/g of chromium content. Ammonia - ammonium chloride -alpha, alpha- bipyridyl - nitrosyl Sodium - sodium sulfite medium polarographic method, 10μg/g ~ 150μg/g of chromium content.

2 Normative references

The following documents contain provisions which, through reference

GB/T 14506 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. Laboratory use specifications and test methods GB/T 6682 Analysis

GB/T 14506.1 Silicate rocks - Part 1. Determination of water adsorption 3-diphenyl-carbon acid dihydrazide spectrophotometry

3.1 Principle Sample alkali fusion sodium peroxide decomposition, water extraction, dry filter, take part serum in sulfuric acid (0.1mol/L) medium, hexavalent chromium and two Phenyl carbon dihydrazide form soluble purple complex, on a spectrophotometer, a wavelength of 540nm measured absorbance, calculate the amount of chromium.

3.2 Reagents Unless otherwise stated in this section are consistent with the use of analytical reagent and

GB/T 6682 analytical laboratory use in the analysis.

3.2.1 Sodium peroxide (powder).

3.2.2 sodium hydroxide.

3.2.3 Silica (spectroscopically pure).

3.2.4 ferric oxide (high purity).

3.2.5 sulfuric acid (11). Warning

--- improper dilution risk prone

3.2.6 sulfuric acid (15). Warning

--- improper dilution risk prone