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CCS D53



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

GB/T 14506.25-2010

Replacing GB/T 14506.25-1993

**Methods for chemical analysis of silicate rocks - Part 25:
Determination of molybdenum and tungsten content**

硅酸盐岩石化学分析方法 第25部分：钼和钨量测定

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Table of Contents

- 1 Scope
- 2 Normative references
- 4 Reagents

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 14506.25-2010 is the Chinese national standard on methods for chemical analysis of silicate rocks - part 25: determination of molybdenum and tungsten 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 molybdenum and tungsten determination of the amount of silicate rock. This section applies to the determination of silicate rocks molybdenum and tungsten content, and also applicable to the determination of molybdenum and tungsten content of soils and stream sediments. Measuring range. 0.25µg/g ~ 10µg/g of molybdenum, 0.50µg/g ~ 20µg/g of tungsten 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 Principle

3 Sample molten sodium peroxide, sulfuric acid - phenyl acetic acid - cinchonine -2.4% potassium chlorate, the molybdenum and tungsten can produce sensitive polarographic Catalytic wave on the oscilloscope Polarograph, peak potential is -0.28V and -0.76V (saturated calomel electrode), and a regular part of the derivative section respectively Determination of molybdenum and tungsten, molybdenum and tungsten peak height and concentration is linear, calculate the amount of molybdenum and tungsten.

4 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.

4.1 sodium peroxide.

4.2 sodium (potassium).

4.4 sulfuric acid (11), pure class distinctions. Warning

--- improper dilution risk prone

4.5 phenylhydroxyacetic acid solution (100g/L).

4.6 cinchonine solution (4g/L). Weigh 0.4g cinchonine, placed in 150mL beaker, add 20mL water, a solution of sulfuric acid (4.4) Number Solubilization drops, water moved 100mL flask and dilute to volume, shake.

4.7 potassium chlorate solution (60g/L).

4.8 Molybdenum standard solution.

a) Molybdenum standard solution (100.0 μ g/mL). Weigh 0.1500g previously burned through 500 °C 1h and was the dryer to cool high-purity molybdenum trichloride, placed burning 150mL Cup, 10mL was added sodium hydroxide solution (100g/L), dissolved using sulfuric acid (4.4) and neutralize excess 1mL, transferred to 1000mL Volumetric flask, dilute to the mark, shake, solution 1mL 100.0 μ g containing molybdenum;

b) Molybdenum standard solution (10.0 μ g/mL).