

ICS 73.060
CCS D40



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

GB/T 14352.2-2010

Replacing GB/T 14352.2-1993

**Methods for chemical analysis of tungsten ores and
molybdenum ores - Part 2: Determination of molybdenum
content**

钨矿石、钼矿石化学分析方法 第2部分：钼量测定

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Foreword

GB/T 14352 "tungsten ores and molybdenum ores chemical analysis methods," a total of 18 parts.

- Part 1. Determination of tungsten;
- Part 2. Determination of molybdenum;
- Part 3. Determination of copper content;
- Part 4. Determination of lead content;
- Part 5. Determination of the amount of zinc;
- Part 6. Determination of cadmium content;
- Part 7. Determination of cobalt content;
- Part 8. Determination of nickel content;
- Part 9. Determination of sulfur content;
- Part 10. Determination of arsenic content;
- Part 11. Determination of the amount of bismuth;
- Part 12. determination of silver;
- Part 13. Determination of tin;

1 Scope

GB/T 14352.2-2010 is the Chinese national standard on methods for chemical analysis of tungsten ores and molybdenum ores - part 2: determination of molybdenum 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 73.060, CCS D40. 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 14352 provides for tungsten ores and determination of molybdenum content of molybdenum ore. This Part applies to tungsten ores and determination of molybdenum content of molybdenum ore. Measurement range. from 0.01% to 5% molybdenum.

2 Normative references

The following documents contain provisions which, through reference

GB/T 14352 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 14505 method for chemical analysis of rocks and ores General rules and regulations Principle

3 Sample molten sodium peroxide, the flooding, and the filtrate in sulfuric acid medium with copper catalysis, thiourea molybdenum reduction pentavalent state, and thiocyanate Combined into a soluble salt molybdenum complex thiocyanate orange, on a spectrophotometer, the absorbance is measured at a wavelength of 460nm, and calculate the amount of molybdenum.

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 sulfuric acid - copper sulfate solution. Weigh 4g of copper sulfate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$), was added 500mL of water, stirred and dissolved, sulfuric acid was added 500mL ($\rho=1.84\text{g/mL}$), Stir, cooled diluted with water to 1000mL, shake.

4.3 sodium citrate solution (300g/L).

4.4 thiourea solution (90g/L).

4.5 solution of potassium thiocyanate (250g/L).

4.6 Molybdenum standard solution [$\rho(\text{Mo}) = 100.0\mu\text{g/mL}$]. 0.1500g weighed molybdenum trioxide (99.99%) (previously calcined at 500 °C over), placed in 100mL beaker, add 5mL hydroxide Sodium solution (200g/L) was dissolved, then add sulfuric acid solution (11) (Caution. improper dilution prone risk) and to slightly acidic, and had The amount of 20mL, transferred to 1000mL volumetric flask, dilute to the mark, shake.

5 Instruments

5.1 Analytical balance. three, a sense of the amount of 0.1mg.

5.2 Spectrophotometer.