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

GB/T 14352.10-2010

Replacing GB/T 14352.10-1993

**Methods for chemical analysis of tungsten ores and
molybdenum ores -- Part 10: Determination of arsenic content**

钨矿石、钼矿石化学分析方法 第10部分：砷量测定

(English Translation)

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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;
- Part 14. Determination of gallium;
- Part 15. Determination of germanium content;
- Part 16. Determination of the amount of selenium;
- Part 17. Determination of tellurium content;
- Part 18. Determination of the amount of rhenium.

This section GB/T Part of 1,014,352.

This Part replaces GB/T 14352.10-1993 "tungsten ores and molybdenum ores - Methods for chemical analysis diethyl dithiocarbamate silver Determination of arsenic content "of the law.

Section compared with the GB/T 14352.10-1993, major changes in the following.

--- Increased alert, warnings;

--- Modify the sample drying temperature.

Appendix A of this section is an informative annex.

This section presents the People's Republic of China Ministry of Land Resources.

This part of the National Standardization Technical Committee under the jurisdiction of Land and Resources.

This section is responsible for drafting. National geology test center.

This section is drafted. Jiangsu Provincial Institute of Geological Survey (Ministry of Land and Mineral Resources Supervision and Testing Center, Nanjing).

1 Scope

This section GB/T 14352 specifies the method for the determination of tungsten ores and molybdenum ores of arsenic content.

This Part applies to tungsten ores and determination of arsenic content of molybdenum ore.

Measuring range. 5μg/g ~ 1500μg/g arsenic.

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 with nitric acid, sulfuric acid decomposition in sulfuric acid medium, in the presence of potassium iodide, stannous chloride with the pentavalent arsenic to trivalent arsenic reduction, reuse Arsenic-free zinc particles is reduced to trivalent arsenic gaseous arsine. Arsine evolution, triethanolamine containing diethyl dithiocarbamate Silver (Ag-DDTC) of the chloroform solution absorption. The Ag-DDTC silver ions are reduced to red-brown colloidal silver, on a spectrophotometer, the absorbance was measured at 530nm

wavelength, and calculate the amount of arsenic.

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

arsenic-free zinc particles (diameter of 2mm ~ 3mm).

Nitrate 4.2 (ρ 1.42g/mL).

4.3

chloroform.

4.4

sulfuric acid (11), Warning. improper dilution risk prone.

4.5

potassium iodide solution (300g/L).

4.6

tartaric acid solution (500g/L).

4.7

stannous chloride solution (200g/L).

Weigh 20g of stannous chloride ($\text{SnCl}_2 \cdot 2\text{H}_2\text{O}$), was added 25mL of hydrochloric acid (ρ 1.19g/mL), heated and dissolved, after cooling diluted with water to 100mL, into 1g tin particles, stored in a brown bottle.

4.8

ammonium ferric sulfate solution (20mgFe/mL).

Weigh 173g of ammonium ferric sulfate [$\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$], and 10mL water was added sulfuric acid (4.4), stirring dissolved, moved 1000mL volumetric flask, dilute to the mark, shake.

4.9

Lead acetate cotton.