

ICS 73.060
CCS D 42

YS

**NONFERROUS METALS INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YS/T 556.4-2009

Replacing YS/T 556.4-2006

**Methods for chemical analysis of antimony concentrates. Part
4: Determination of arsenic content. Weighing method**

锑精矿化学分析方法 第4部分：湿存水量的测定重量法

(English Translation)

Issued on: December 4, 2009

Implemented on: June 1, 2010

Issued by: Ministry of Industry and Information Technology

Table of Contents

Foreword
1 Scope
2 Normative references
3 Method summary
4 Equipment and appliances
5 Sample
6 Step, Analysis
6.1 Sample
6.2 Determination

Foreword

YS/T 556-2009 "Methods for chemical analysis of antimony concentrate," a total of 16 parts.

- Part 1. Determination of antimony content cerium sulfate titration;
- Part 2. Determination of arsenic content potassium bromate titration;
- Part 3. Determination of lead content by flame atomic absorption spectrometry;
- Part 4. Wet water storage Gravimetric method;
- Part 5. Determination of zinc content - Flame atomic absorption spectrometry;
- Part 6. Determination of the amount of selenium by hydride generation - atomic fluorescence spectrometry;
- Part 7. Determination of the amount of mercury atomic fluorescence spectrometry;
- Part 8. Determination of sulfur content - Combustion neutralization method;
- Part 9. Determination of the amount of gold fire assay;
- Part 10. Determination of copper content - Flame atomic absorption spectrometry;
- Part 11. Determination of cadmium content by flame atomic absorption spectrometry;
- Part 12. Determination of bismuth content by flame atomic absorption spectrometry;
- Part 13. Determination of nickel content by flame atomic absorption spectrometry;
- Part 14. Determination of the amount of silver by flame atomic absorption spectrometry;

--- Part 15. antimony, tin measured by hydride generation - atomic fluorescence spectrometry;

--- Part 16. Determination of antimony metal content by inductively coupled plasma emission spectrometry.

This section YS/T Section 4556 of.

The partial replacement of YS/T 556.4-2006 "Antimony concentrates - Determination of hygroscopic water method" (formerly GB/T 15080.4-

1994). Compared with YS/T 556.1-2006, this part of the following changes.

--- Determination capped by extending reach 12% to 20%;

--- Text format has been modified.

The non-ferrous metal part by the National Standardization Technical Committee and centralized.

This section is responsible for drafting unit. tin mine Twinkling Star Antimony Industry Co., Ltd., Beijing General Research Institute of Mining and Metallurgy.

1 Scope

YS/T of the provisions of section 556 of the measurement method in antimony concentrate hygroscopic water.

This section applies to the determination of antimony concentrate water wet deposit. Measurement range. 0.1% to 20%.

2 Normative references

The following documents contain provisions which, through YS/T reference in this 556 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.

GB/T 7146 bags antimony ore sampling and sample preparation method

3 Method summary

Sample at $105\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ drying, wet storage level measured by the gravimetric method.

4 Equipment and appliances

4.1

balance, a sense of the amount of 0.1g.

4.2

drying trays, the bottom area of 450cm² ~ 600cm² rectangular corrosion-resistant metal plate.

4.3

electric oven.

5 Sample

According to GB/T 7146 water measurement sample preparation, stored in a sealed container.

6.1 Sample

1000g ~ 2000g sample weighed to the nearest 0.5g.

6.2 Determination

6.2.3

containing the sample (6.1) in dry dish (4.2) into a 105 °C ± 5 °C the electric oven (4.3), the dried 2h. From the power Heat oven thermostat (4.3) out of the dry plate (4.2), hot immediately weighed. Cold weighing, should be dryer to cool to room temperature and weighed.

The results of calculation 7 According to formula (1) to calculate the mass fraction of water in wet H₂O, expressed in%.

H₂O =

100 (1)