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YS

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

YS/T 239.4-2010

Replacing YS/T 239.4-1994

**Methods for chemical analysis of antimony trisulfide. Part 4:
Determination of aqua-regia insolubles content. Gravimetric
method**

三硫化二锑化学分析方法 第4部分：王水不溶物的测定重量法
(English Translation)

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Foreword

YS/T 239 "Methods for chemical analysis of antimony trisulfide" There are seven sections.

- Part 1. Determination of antimony content cerium sulfate titration;
- Part 2. Determination of the amount of sulfur compounds and combustion titration method;
- Part 3. Determination of free sulfur content and combustion titration method;
- Part 4. aqua regia insolubles - Gravimetric method;
- Part 5. Determination of arsenic content of arsenic molybdenum blue spectrophotometric method;
- Part 6. Determination of iron content of phenanthroline spectrophotometry;
- Part 7. Determination of lead content by flame atomic absorption spectrometry.

This is Part 4.

This section is in accordance with GB/T 1.1-2009 given rules drafted.

The partial replacement of YS/T 239.4-1994 "Determination of aqua regia insoluble matters antimony trisulfide gravimetric method for chemical analysis." versus YS/T 239.4-1994 compared to this part of the following changes.

- Text format has been modified;
- Complements the precision and quality assurance and control provisions.

This standard by the national non-ferrous metals Standardization Technical Committee

(SAC/TC243) centralized.

1 Scope

This section YS/T 239 specifies the method for determination of aqua regia insoluble antimony trisulfide.

This section applies to the determination of antimony trisulfide insoluble in aqua regia.
Measurement range. aqua regia insolubles content 0.050% 0.60%.

2 Method summary

Sample was dissolved with hydrochloric acid, boil drive to make hydrogen sulfide, nitric acid plus dissolved in aqua regia weight determination of insolubles.

3 Reagents

Unless otherwise indicated, the reagents used in this section refer to water and recognized analytical reagent and tertiary water.

3.1

hydrochloride (ρ 1.19g/mL).

Nitrate 3.2 (ρ 1.42g/mL).

3.3

hydrochloride (21).

3.4

silver nitrate solution (20g/L).

4 Sample

4.1

Sample size should be less than 0.100mm.

4.2

specimen should be 100 °C ~ 105 °C drying 1h, placed in a desiccator to cool to room temperature.

5.1 Sample

Weigh 5.0g sample, accurate to 0.001g.

5.2 Determination of the number of Independently measured twice and averaged.

5.3 Blank test

Along with sample blank test.

5.4 Determination

5.4.1

The sample (5.1) into 300mL beaker, add 60mL of hydrochloric acid (3.1), shake the beaker slightly promote dissolution, heat gently to dissolve again