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YS

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

YS/T 535.8-2009

Replacing YS/T 535.8-2006

**Chemical analysis methods of sodium fluoride. Part 8:
Determination of water insoluble matter content. Gravimetric
method**

氟化钠化学分析方法 第8部分：水不溶物含量的测定重量法
(English Translation)

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Foreword

YS/T 535 "sodium fluoride chemical analysis method" is divided into 10 parts.

- Part 1. Determination of wet water content - Weight method;
- Part 2. Determination of fluorine content - Distillation - thorium nitrate titration capacity method;
- Part 3. Determination of silicon content - Molybdenum blue spectrophotometric method;
- Part 4. Determination of iron content - o - phenanthroline spectrophotometric method;
- Part 5. Determination of soluble sulfate content - Turbidimetric method;
- Part 6. Determination of carbonate content - Gravimetric method;
- Part 7. Determination of acidity and neutral method;
- Part 8. Determination of water insoluble content - Gravimetric method;
- Part 9. Determination of chlorine content - Turbidimetric method;
- Part 10. Preparation and storage of specimens.

This section is part 8.

This part replaces YS/T 535.8-2006 (original GB/T 8158.8-1987).

This part is the revision of YS/T 535.8-2006 "Determination of water insoluble content by gravimetric method for chemical analysis of sodium fluoride" YS/T 535.8-2006 compared to increase the precision and quality assurance and control and so on.

This part of the National Nonferrous Metals Standardization Technical Committee proposed and centralized.

1 Scope

This section specifies the determination of the amount of water insoluble in sodium fluoride.

This part is applicable to the determination of the amount of water insoluble in sodium fluoride. Determination range (mass fraction). $\leq 15.0\%$.

2 Normative reference documents

The terms of this document are incorporated by reference in this section and become part of this section. Whichever is the date of the reference file, which is followed by all (Excluding corrigenda) or revisions do not apply to this part, however, encourage parties to reach an agreement under this section Whether you can use the latest version of these files. For undated references, the latest edition applies to this section.

Methods for chemical analysis of sodium fluoride - Part 10. Preparation and storage of samples YS/T 535.10-2009

3 Method summary

Dissolve the sample with water, filter out insoluble matter, dry weighing.

4 Instruments and equipment

4.1

General laboratory equipment.

4.2

glass filter crucible (G3).

4.3

blast oven. can control at $110\text{ }^{\circ}\text{C} \pm 8\text{ }^{\circ}\text{C}$.

5 Samples

The specimen shall comply with the requirements of 4.2 of YS/T 535.10-2009.

6.1 Samples

6.2 The number of measurements Independent of the two measurements, whichever is the average.

6.3 Determination

6.3.1

Place the sample (6.1) in a 400 mL beaker, add 200 mL of water, heat the solution to near boiling and hold for about 10 min, the solution was filtered through a glass filter crucible (4.2) by vacuum filtration (the crucible was previously dried at $110^{\circ}\text{C} \pm 5^{\circ}\text{C}$ oven (4.3) for 2 h or more and dried After the equipment is cooled and weighed). The precipitate was washed four times with approximately 50 mL of water at approximately 80°C each.

6.3.2

The glass filter crucible was placed in an oven (4.3) and held at $110^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 2 h.

6.3.3

Remove the crucible from the oven, place it in a drier, and cool it and weigh it.

6.3.4

Repeat heating, cooling and weighing until the difference between successive weighing is not more than 1mg.

Note: The empty crucible and the crucible with the sample should have the same cooling time in the dryer.