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YS

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

YS/T 534.2-2007

Replacing YS/T 534.2-2006

**Chemical analysis methods of aluminium hydroxide. Part 2:
Determination of the loss of mass at 1100 Celsius. Gravimetric
method**

氢氧化铝化学分析方法 第2部分：烧失量的测定 重量法

(English Translation)

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Foreword

YS/T 534-2007 "chemical analysis of aluminum hydroxide" is YS/T 534-2006 (formerly GB/T 6610-2003) amendments it is divided into five parts.

--- Part 1. Determination of moisture content - Gravimetric method

--- Part 2. loss on ignition - Gravimetric method

--- Part 3. Determination of silica content molybdenum blue photometric

--- Part 4. Determination of iron oxide content phenanthroline spectrophotometry
Determination of sodium oxide content. Part 5 ---this is Part 2.

The partial replacement of YS/T 534.2-2006 (formerly GB/T 6610.2-2003).

This part is YS/T 534.2-2006 "Chemical analysis methods of aluminum hydroxide - Part 2. loss on ignition - Gravimetric method" compilation Series finishing.

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

This part of the Aluminum Corporation of China Zhengzhou Research Institute is responsible for drafting.

This section drafted by the Aluminum Corporation of China Shandong Branch.

1 Scope

This section provides the determination of aluminum hydroxide in the loss on ignition.

This section applies to the determination of loss on aluminum hydroxide boil. Measurement range. 25.00% - 35.00%.

2 Principle of the method

The sample after the $110\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ drying, $\pm 20\text{ }^{\circ}\text{C}$ calcined at $1100\text{ }^{\circ}\text{C}$, in order to calculate the loss of mass loss on ignition of the mass fraction.

3 Instrument

3.1

Analytical balance. accuracy 0.0001g .

3.2

vacuum dryer. diameter 21cm , with the new desiccant activated alumina. While cooling the same vacuum desiccator appropriate number of weighing bottle. E.g., an inner diameter of 21cm vacuum dryer, while cooling the weighing bottle not more than six.

3.3

Oven. temperature can be controlled at $110\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$, can not be simultaneously dried in an oven other materials.

3.4

high-temperature furnace. temperature can be controlled at $1100\text{ }^{\circ}\text{C} \pm 20\text{ }^{\circ}\text{C}$.

4 Sample

4.1

specimen weighing bottle is placed in advance at $110\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ drying 2h , stored in a vacuum desiccator (3.2), cooled to room temperature before use.

4.2

activated alumina activated. will be filled with activated alumina beaker was placed in an oven with a blower, drying at $300\text{ }^{\circ}\text{C} \sim 350\text{ }^{\circ}\text{C}$ $3\text{h} \sim 4\text{h}$ removed immediately placed in a vacuum dryer to cool to room temperature before use. Activated alumina is generally used to burn 6 Determination of loss.

5.1 Sample

Weigh 2.0g sample (4.1), accurate to 0.0001g .

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

5.3 Determination

5.3.1

The platinum crucible and the lid is placed high temperature furnace (3.4), the control temperature of $1100\text{ }^{\circ}\text{C} \pm 20\text{ }^{\circ}\text{C}$ burning 30min. Coolish removed, placed in a vacuum Dryer (3.2), cooled 40min, weighing, accurate to 0.0001g, repeat weighed to constant weight.

5.3.2

was added to a platinum crucible sample (5.1), weighed to the nearest 0.0001g. The high temperature crucible lid partially opened, placed about $100\text{ }^{\circ}\text{C}$ of Furnace (3.4), the temperature was slowly raised to $600\text{ deg.}]^{\circ}\text{C}$, then warmed to $1100\text{ }^{\circ}\text{C} \pm 20\text{ }^{\circ}\text{C}$, burning 1.5h, removed Coolish, platinum crucible in a vacuum dry Dryer (3.2), cooled 40min, cover the crucible cover, weighing, accurate to 0.0001g, repeat weighed to constant weight.

Calculation results of the analysis of 6 According to a formula ignition loss of mass fraction (%).

Where.