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

YS/T 273.2-2006

**Chemical analysis methods and physical properties of cryolite.
Part 2: Determination of ignition loss
(English Translation)**

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Foreword

YS/T 273 "Chemical analysis methods and physical properties of cryolite" is divided into 13 parts:

- Part 1: Determination of moisture content - Gravimetric method;
- Part 2: Determination of ignition loss;
- Part 3: Determination of fluoride content;
- Part 4: Determination of aluminum content - EDTA titration method;
- Part 5: Determination of sodium by flame atomic absorption spectrometric method;
- Part 6: Determination of silica content by the molybdenum blue photometric;
- Part 7: Determination of iron content by orthophenanthroline photometric method;
- Part 8: Determination of sulfate content - Barium sulfate gravimetric method;
- Part 9: Determination of phosphorus pentoxide content - Molybdenum blue photometric method;
- Part 10: Determination of alumina content by gravimetric method;
- Part 11: Determination of sulphur content by X-ray fluorescence spectrometric method;

-- Part 12: The atomic absorption spectrophotometric method for the determination of calcium oxide content;

-- Part 13: Preparation and storage of test samples.

This Part is Part 2.

YS/T 273.2-1994 was rarely used because the method is cumbersome; furthermore, the current trade requires the ignition loss at 550 °C, so this method was redrafted.

This Part replaced YS/T 273.2-1994.

This Part was proposed by and shall be under the jurisdiction of the National Technical Committee on Nonferrous Metals of Standardization Administration of China.

Fushun Aluminium Plant AND China National Nonferrous Metals Industry Standard & Metrology & Quality Research Institute are responsible for the drafting of this Part.

Chemical analysis methods and physical properties of
cryolite - Part 2: Determination of ignition loss

1 Scope

This Part specifies the method for determination of cryolite ignition loss.

This Part applies to the determination of cryolite ignition loss. Determination range:
≤6.00%.

2 Method summary

The sample is burned at 550 °C±5 °C for 30 minutes. The amount of mass reduction after burning is the ignition loss.

4 Test sample

The sample shall comply with the requirements of 3.2 in YS/T 273.13.

5.1 Test portion

Weigh 2.5 g of dry test sample (4), accurate to 0.0001 g.

5.2 Number of determinations

Two determinations shall be carried out independently and the average value shall be

taken.

5.3.1 Turn on the high-temperature furnace (3.1), adjust the furnace temperature to

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