

ICS 71.040.40

YS

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

YS/T 575.20-2021

**Methods for chemical analysis of bauxite - Part 20: Preparation
of pre-dried sample
(English Translation)**

Issued on: March 5, 2021

Implemented on: July 1, 2021

Issued by: Ministry of Industry and Information Technology

Table of Contents

Foreword...	3
Introduction...	6
1 Scope...	7
2 Normative references...	7
3 Terms and definitions...	7
4 Principle...	7
5 Instruments and equipment...	7
6 Specimen...	8
7 Test steps...	8

Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020

"Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents".

This document is Part 20 of YS/T 575 "Methods for chemical analysis of bauxite". YS/T

575 has published the following parts:

- Part 1: Determination of aluminium oxide content EDTA titrimetric method;
- Part 2: Determination of silicon dioxide content - Gravimetric-molybdenum blue photometric method;
- Part 3: Determination of silicon dioxide content molybdenum blue photometric method;
- Part 4: Determination of iron oxide content - Dichromate titrimetric method;
- Part 5: Determination of iron oxide content - Orthophenanthroline photometric method;
- Part 6: Determination of titanium dioxide content - Diantipyrylmethane photometric method;
- Part 7: Determination of calcium oxide content - Flame atomic absorption

spectrophotometric method;

- Part 8: Determination of magnesium oxide content - Flame atomic absorption

spectrophotometric method;

- Part 9: Determination of potassium oxide and sodium oxide content - Flame atomic absorption spectrophotometric method;

- Part 10: Determination of manganese oxide content - Flame atomic absorption spectrophotometric method;

- Part 11: Determination of chromium oxide content - Flame atomic absorption spectrophotometric method;

- Part 12: Determination of vanadium pentoxide content - N-benzoyl-N-phenylhydroxylamine photometric method;

- Part 13: Determination of zinc content flame - Atomic absorption spectrophotometric method;

- Part 14: Determination the total content of rare earth oxide - Tribromo-arsenazo
Methods for chemical analysis of bauxite - Part 20:

Preparation of pre-dried sample

1 Scope

This document specifies the preparation method of pre-dried specimen in bauxite.

This document is applicable to the preparation of pre-dried specimen in bauxite; the dried specimens are mainly used for the determination of chemical composition.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in the text. Among them, for dated references, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

GB/T 25949 Aluminium ores - Preparation of samples

3 Terms and definitions

There are no terms and definitions that need to be defined in this document.

4 Principle

The specimen is dried in an oven at $110\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ until the mass remains constant.

5.1 Dryer: Contains activated alumina (heated at $300\text{ }^{\circ}\text{C} \pm 10\text{ }^{\circ}\text{C}$ for activation for 5 h

before use) or color-changing silica gel (heated at $120\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ for regeneration for 4 h before use).

5.2 Oven: The temperature can be controlled at $110\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$; the air flow is guaranteed

in the oven.

5.4 Weighing bottle: It has lid and large enough to hold the required specimen amount.

.....