

Translated English of Chinese Standard: YS/T509.11-2008

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

YS

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

ICS 77.120.99

H 64

YS/T 509.11-2008

Replacing YS/T 509.12-2006

Methods for Chemical Analysis of Spodumene and Lepidolite Concentrates - Determination of Loss on Ignition - Gravimetric Method

锂辉石、锂云母精矿化学分析方法 烧失量的测定 重量法

Issued on: March 12, 2008

Implemented on: September 01, 2008

Issued by: National Development and Reform Commission of China

Table of Contents

Foreword.....	3
1 Scope.....	5
2 Summary of Method.....	5
3 Instrument.....	5
4 Specimen.....	5
5 Analysis Procedures	5
6 Calculation of the Analysis Results	6
7 Precision	6
8 Quality Assurance and Control	7

Foreword

YS/T 509 *Methods for chemical analysis of spodumene and lepidolite concentrates* consists of the following 11 parts:

- Part 1: Determination of lithium oxide sodium oxide and potassium oxide contents - Flame atomic absorption spectrometric method;
- Part 2: Determination of rubidium oxide and caesium oxide contents - Flame atomic absorption spectrometric method;
- Part 3: Determination of silicon dioxide content - Gravimetric-molybdenum blue photometric method;
- Part 4: Determination of aluminium oxide content - EDTA compleximetric method;
- Part 5: Determination of ferric oxide content - O-phenanthroline photometric method and EDTA compleximetric method;
- Part 6: Determination of phosphorus pentoxide content - The molybdenum blue photometric method;
- Part 7: Determination of beryllium oxide content – Chromazurol S and cetyltrimethyl ammonium bromide spectrophotometric method;
- Part 8: Determination of calcium oxide and magnesium oxide content - Flame atomic absorption spectrometric method;
- Part 9: Determination of fluorine content - Ion selective electrode method;
- Part 10: Determination of manganous oxide content-Persulfate oxidation photometric method;
- Part 11: Determination of loss on ignition - Gravimetric method.

This Part is Part 11.

This Part replaced YS/T 509.12-2006 *Methods for Chemical Analysis of Spodumene and Lepidolite Concentrates - The Gravimetric Method for the Determination of Loss on Ignition* (original GB/T 3885.12-1983).

Compared with YS/T 509.12-2006, the major changes of this Part are as follows:

- Re-edit the text format;
- Supplement the quality assurance and control clauses; and add the repeatability clause.

Methods for Chemical Analysis of Spodumene and Lepidolite Concentrates - Determination of Loss on Ignition - Gravimetric Method

1 Scope

This Part specifies the method for determining loss on ignition in spodumene and lepidolite concentrates.

This Part is applicable to the determination of loss on ignition in spodumene and lepidolite concentrates.

2 Summary of Method

The test material is placed in a high-temperature furnace and burned repeatedly at 900°C~950°C to a constant weight.

3 Instrument

High-temperature furnace: Equipped with thermocouple for temperature measurement and millivoltmeter.

4 Specimen

4.1 Spodumene concentrates shall pass through a sieve with a mesh of 0.074mm; and lepidolite concentrates shall pass through a sieve with a mesh of 0.105mm.

4.2 The specimen is pre-baked at 105°C~110°C for 2h; and then placed in a desiccator to cool to room temperature.

5 Analysis Procedures

5.1 Test material

Weigh 2.0g of spodumene concentrate specimen, accurate to 0.0001g. Weigh 0.50g

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----