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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5195.18-2018

**Fluorspar -- Determination of barium sulfate content --
Gravimetric method**

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4.4 Ammonium acetate, 200 g/L .

4.5 sulfuric acid, 1:1.

5 Instruments and materials

5.2 Porcelain filter crucible with a pore size of $1.6 \mu\text{m} \sim 4 \mu\text{m}$.

5.3 Quantify slow filter paper.

Foreword

The analysis method of GB/T 5195 fluorite is divided into the following parts.

- GB/T 5195.1 Determination of fluorite calcium fluoride content EDTA titration and distillation - potentiometric titration;
- GB/T 5195.2 Determination of fluorite carbonate content;
- GB/T 5195.3 Determination of the mass loss of fluorite 105°C ;
- GB/T 5195.4 Determination of fluorite content of fluorite - Iodometric method;
- GB/T 5195.5 Determination of total sulfur content of fluorite - Tube furnace combustion - Potassium iodate titration;
- GB/T 5195.6 Determination of fluorite phosphorus content by spectrophotometry;
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- GB/T 5195.8 Determination of fluorite silica content;
- GB/T 5195.9 Determination of the weight loss of fluorite burning;
- GB/T 5195.10 Determination of fluorite iron content - phenanthroline spectrophotometric method;

- GB/T 5195.11 Determination of manganese content of fluorite - periodate spectrophotometric method;
- GB/T 5195.12 Determination of arsenic content of fluorite atomic fluorescence spectrometry;
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- GB/T 5195.15 Determination of calcium, aluminum, silicon, phosphorus, sulfur, potassium, iron, antimony and lead in fluorite. Wavelength dispersive X-ray fluorescence Spectral method
- GB/T 5195.16 Determination of fluorite silicon, aluminium, iron, potassium, magnesium and titanium content - Inductively coupled plasma atomic emission Spectral method
- GB/T 5195.17 Determination of the content of fluorite flotation agent;
- GB/T 5195.18 Determination of fluorite strontium sulfate content by weight method;
- GB/T 5195.19 Determination of arsenic content of fluorite - Diethyldithiocarbamate silver photometric method.

This part is the 18th part of GB/T 5195.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the redrafting method to modify the weight of ISO 5437.1992 "acid grade and ceramic grade fluorite barium sulfate content.

law".

This section has more structural adjustments than ISO 5437.1992. This section is listed in Appendix A with ISO 5437.1992.

Chapter and chapter comparison list.

This section has technical differences compared to ISO 5437.1992, which is given in Appendix B and ISO 5437.1992.

A list of sexual differences and their causes.

This section also made the following editorial changes.

- In line with the existing standard series, the standard name was changed to "Measurement Weight Method of Fluorite Barium Sulfate Content";
- Added informative Appendix A and Appendix B to provide a comparison and technicality

of this part with the structural changes of ISO 5437.1992

Description of the difference.

This part was proposed by the China Iron and Steel Association.

This part is under the jurisdiction of the National Steel Standardization Technical Committee (SAC/TC183).

This section drafted by. Shanghai Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China Industrial Products and Raw Materials Testing Technology Center, Qingdao Bozheng

Inspection Technology Co., Ltd., Metallurgical Industry Information Standards Institute.

1 Scope

This part of GB/T 5195 specifies a method for the determination of barium sulfate in fluorite by gravimetric method.

This section applies to the determination of barium sulfate content in acid grade and ceramic grade fluorite, the measurement range (mass fraction). 0.10% or more.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6379.2 Accuracy of measurement methods and results (accuracy and precision) Part 2. Determination of standard method of measurement

Basic methods of sex and reproducibility (GB/T 6379.2-2014, ISO 5725-2.1994, IDT)

GB/T 6682 Analytical laboratory water specifications and test methods (GB/T 6682-2008, ISO 3696.1987, MOD)

GB/T 8170 Numerical Rounding Rules and Representation and Determination of Limit Values

GB/T 22564 Fluorite sampling and sample preparation (GB/T 22564-2008, ISO 8868.1989, IDT)

3 Principle

The sample was decomposed with hydrofluoric acid and concentrated sulfuric acid and evaporated to dryness. The soluble salts were dissolved using a hydrochloric acid-sulfuric

acid mixed solution and filtered. Burning filter residue

Burning, weighing, is the weight of barium sulfate.

4 reagents

Unless otherwise stated, use only approved analytical reagents and secondary water in accordance with GB/T 6682 or equivalent in purity

Water.

4.2 sulfuric acid, $\rho = 1.84 \text{ g/mL}$.

4.3 hydrochloric acid-sulfuric acid mixed acid, 100mL hydrochloric acid ($\rho=1.19\text{g/mL}$) was added to 500mL water, slowly added 20mL sulfuric acid

(4.2), mix and dilute to 1000 mL.

5 Instruments and materials

5.1 Platinum plate, a polytetrafluoroethylene beaker having a diameter of approximately 90 mm and a volume of approximately.200 mL, or a volume of approximately.200 mL.