

ICS 73.080

CCS D53



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

GB/T 14506.19-2010

Replacing GB/T 14506.19-1993

**Methods for chemical analysis of silicate rocks - Part 19:
Determination of lead content**

硅酸盐岩石化学分析方法 第19部分：铅量测定

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Quarantine of the People's Republic of China;
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Foreword

GB/T 14506 "Methods for chemical analysis of silicate rocks" 30 consists of the following components.

- Part 1. Determination of water absorption;
- Part 2. Determination of combined water;
- Part 3. Determination of the amount of silica;
- Part 4. Determination of the amount of aluminum oxide;
- Part 5. Determination of total iron content;
- Part 6. Determination of calcium oxide content;
- Part 7. Determination of the amount of magnesium oxide;
- Part 8. Determination of the amount of titanium dioxide;
- Part 9. Determination of the amount of phosphorus pentoxide;
- Part 10. Determination of the amount of manganese oxide;
- Part 11. Determination of the amount of sodium hydroxide and oxide;
- Part 12. Determination of the amount of fluorine;
- Part 13. Determination of sulfur content;

1 Scope

GB/T 14506.19-2010 is the Chinese national standard on methods for chemical analysis of silicate rocks - part 19: determination of lead content, in the field of mining and minerals. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 10 November 2010 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force

since 1 February 2011. Classification: ICS 73.080, CCS D53. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

GB/T 14506 provisions of this part of the determination of the amount of lead silicate rocks. This section applies to the amount of lead in the determination of silicate rocks, is also applicable to the determination of lead in soil and stream sediment volume. Not for containing Iron, titanium gabbro. Measurement range. Flame atomic absorption spectrophotometry, 5µg/mL ~ 500µg/mL of lead content. Hydrochloric acid - tartaric acid - potassium Polarographic France, 10µg/mL ~ 250µg/mL, the amount of lead.

2 Normative references

The following documents contain provisions which, through reference

GB/T 14506 in this section constitute provisions of this section. For dated references, All subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encourage an agreement under this section Parties to study the latest versions of these documents. For undated reference documents, the latest versions apply to this section. Laboratory use specifications and test methods GB/T 6682 Analysis

GB/T 14506.1 Silicate rocks - Part 1. Determination of water adsorption

3 Atomic absorption spectrophotometry

3.1 Principle Samples with hydrochloric acid, nitric acid decomposition, hydrofluoric acid, perchloric acid thermal decomposition and evaporation to take to make white smoke of perchloric acid, the residue was heated with dilute hydrochloric acid leaching, A 5% hydrochloric acid solution. On an atomic absorption spectrophotometer, with continuous spectrum lamp or Zeeman effect background correction wavelength 283.3nm At the air - acetylene flame measured absorbance of lead in computing the amount of lead.

3.2 Reagents Unless otherwise stated in this section are consistent with the use of analytical reagent and GB/T 6682 analytical laboratory use in the analysis.

3.2.1 hydrochloric acid (rho1.19g/mL), pure class distinctions.

3.2.2 hydrochloric acid (11).

3.2.3 nitrate (rho1.42g/mL), pure class distinctions.

3.2.4 hydrofluoric acid (rho1.15g/mL). Warning

--- toxic and corrosive hydrofluoric acid, the operation should wear gloves to prevent skin contact.

3.2.5 perchloric acid ($\rho=1.68\text{g/mL}$), pure class distinctions. Warning

--- explosive materials, careful

3.2.6 Lead standard solution.

a) lead standard solution (1.00mg/mL). [Weigh 1.0000g washed with nitric acid pre-purity lead (19) Wash the surface and then washed with water and ethanol, wind Dry standby] in 250mL beaker, add 10mL of nitric acid (3.2.3), cover the surface of the dish. After completely dissolved by heating, Moved into 1000mL volumetric flask, dilute to the mark, shake;

b) lead standard solution ($20.0\mu\text{g/mL}$). Points to take the lead 20.0mL standard solution [3.2.6a)], into 1000mL volumetric flask, dilute to the mark, shake. time cost Now equipped.