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

GB/T 27975-2011

**Methods for the chemical analysis of granulated blastfurnace
slag**

粒化高炉矿渣的化学分析方法

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

The standard proposed by China Building Materials Federation.

This standard by the National Standardization Technical Committee cement (SAC/TC184) centralized.

This standard was drafted. China Building Materials Science Research Institute, China Building Material Test Certification Center Co., Ltd., Jiaying Southern Water Limited mud.

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Chemical analysis of the granulated blast furnace slag

1 Scope

This standard specifies the granulated blast furnace slag in silica, iron oxide, aluminum oxide, calcium oxide, magnesium oxide, manganese dioxide

Titanium, fluoride, total sulfur, loss on ignition, chloride, water-soluble hexavalent chromium, alkali content, sulfur trioxide, a chemical analysis of water content.

This standard applies to granulated blast furnace slag and chemical analysis specified in this standard to other materials.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein

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

GB/T 176 chemical analysis of cement

GB/T 2007.1 bulk minerals sampling and sample preparation General manual sampling methods Laboratory use specifications and test methods GB/T 6682 Analysis

GB/T 17671 cement mortar strength test method (ISO method) (GB/T 17671-1999, IDTISO 679. 1989) JC/T 681 planetary cement mortar mixer Basic requirements 3 trials 3.1 the number of trials Each number is measured twice, indicating that the measurement result by the average of the two test results. During chemical analysis, unless otherwise indicated, shall be measured at the same time the loss on ignition; the other blank test should be measured at the same time, And to correct the measurement results. It represents 3.2 mass, volume, titer and results Grams (g) represents the mass, accurate to 0.0001g. Burette volume in milliliters (mL) said accurate to 0.05mL. Single titer Indicates milligrams per milliliter (mg/mL). Unless otherwise indicated, the results of the analysis are mass fraction. The results expressed in% to two after the decimal point. Using the same quantities of reagents, no test, tested in accordance with the same measurement step, the measurement result is corrected.

3.4 Burning

The filter paper and the precipitate is fired and the constant has been previously placed in a crucible, in order to avoid generating a flame dried slowly in an oxidizing atmosphere, ashing,

Ashing to no black carbon particles, into the high-temperature furnace (5.6), and at a predetermined temperature burning. Cool to room temperature in a desiccator, and weigh.

After the first burning, cooling, weighing, by continuous burning for every 15min, then cooled, weighing method to check the constant quality

Amount, when the difference is less than two consecutive weighing 0.0005g, which reached constant.