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

**GB/T 9728-2007**

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**Chemical reagent -- General method for the determination of  
sulphate**

**(English Translation)**

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### Foreword

This Standard is not equivalent to ISO 6353-1.1982 Reagents for chemical analysis - Part 1.General test methods.

This Standard replaces GB/T 9728-1988 Chemical reagent - General method for the determination of sulphate.

There is no technical difference between this Standard and the previous version.

This Standard only makes some editorial changes based on requirements in GB/T 1.1-2000.

This Standard was proposed by China Petroleum and Chemical Industry Federation.

This Standard shall be under the jurisdiction of the National Standardization Technical Committee of Chemical Reagents (SAC/TC 63 / SC 3).

The drafting organization of this Standard. Guangdong Guanghua Chemical Factory Co., Ltd.

Main drafters of this Standard. Zhang Zhibin, Li Daopan, and Chen Qunqing.

This Standard was issued in 1988 for the first time.

Chemical reagent -

General method for the determination of sulphate

## 1 Scope

This Standard specifies the general method for the determination of sulphate via visual turbidimetry.

This Standard is applicable to the determination of trace sulfate in chemical reagent. Detection range is 0.4 µg/mL ~ 4 µg/mL (in SO<sub>4</sub>).

## 2 Normative references

The following standards contain the provisions which, through reference in this Standard, constitute the provisions of this Standard. For dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard. However, the parties who enter into agreement based on this Standard are encouraged to investigate whether the latest versions of these documents are applicable. For undated reference documents, the latest versions apply to this Standard.

GB/T 602 Chemical Reagent - Preparations of Standard Solutions for Impurity (GB/T 602-2002, ISO 6353-1.1982, NEQ)

GB/T 603 Chemical Reagent - Preparations of Reagent Solution for Use in Test (GB/T 603-2002, ISO 6353-1.1982, NEQ)

## 3 Principle

In hydrochloric acid medium, barium ions and sulfate ions form insoluble barium sulfate.

## 4 Reagent and material

Unless otherwise specified in this Standard, the standard solution, reagent and product used are prepared according to the provisions in GB/T 602 and GB/T 603.

## 5 Determination

Conduct sampling and prepare sample solution according to the provisions of product standard. Add 0.5 mL of sample solution that is acidified by hydrochloric acid solution (20%).

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