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

GB/T 9741-2008

**Chemical reagent -- General method for the determination of
residue after ignition
(English Translation)**

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Foreword

The degree of consistency between this Standard and ISO 6353-1:1982 "Reagents for chemical analysis -- Part 1: General test methods" is not equivalent.

This Standard replaces GB/T 9741-1988 "Chemical reagent -- General method for the determination of residue after ignition". Compared with GB/T 9741-1988, the main changes in this Standard are as follows:

- Adjust the ignition temperature (Chapter 1, 3.3 of Edition 1988; Chapter 1, 3.3 of this Edition);
- Delete Annex A (Edition 1988).

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

This Standard shall be under the jurisdiction of Subcommittee on Chemical reagents of National Technical Committee on Chemical of Standardization Administration of China (SAC/TC 63/SC 3).

The drafting organization of this Standard: Shanghai Shisi Hewei Chemical Co., Ltd.

Main drafter of this Standard: Jia Ling.

This Standard was first issued in 1988.

Chemical reagent -- General method for the determination
of residue after ignition

1 Scope

This Standard specifies a general method for the gravimetric determination of ignition residue.

This Standard is applicable to the determination of the burning residue of chemical reagents that can be sublimated or carbonized and can be removed at $650^{\circ}\text{C}\pm 50^{\circ}\text{C}$.

When using this standard to measure ignition residue, the mass of the residue calculated based on the sampling amount and specification value shall not be less than 1 mg.

2 Method principle

Utilizing the differences in physical and chemical properties such as volatility, stability to heat, and oxygen between the sample body and the substances that form the residue, the sample is heated at low temperatures to volatilize, carbonize, and burn at high temperatures to completely separate the sample body from the residue. The mass of the residue can be weighed using a scale.

3.2 Crucible or evaporating dish: depending on the nature of the sample, the material

can be platinum, quartz or ceramic.

4.1 Precautions for determination

When volatilizing or carbonizing a sample, if the sample size is large, it can be added in several batches. Add sulfuric acid to the liquid sample. It shall be added all at once before evaporation or carbonization. If the sample is organic, combustion shall be avoided.

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