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

GB/T 17767.1-2008

Replacing GB/T 17767.1-1999

**Determination of organic-inorganic compound fertilizers -- Part
1: Total nitrogen content**

有机-无机复混肥料的测定方法 第1部分：总氮含量

(English Translation)

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Foreword

GB/T 17767 "Organic - inorganic compound fertilizer and method" is divided into three parts.

--- Part 1. total nitrogen content;

--- Part 2. phosphorus content;

--- Part 3. The total potassium content.

This section is GB/T Part of 117,767.

This section of the American Association of Public Analysts Manual of Analytical Methods (AOAC) (1984) in 2.061, "Determination of the total nitrogen content of fertilizers party Law

--- Improved Synthetic nitrogen Law ", the former Soviet Union national standards GOCT26715. 1985" Determination of the total nitrogen content of organic fertilizer, "a Consistency not equivalent.

This Part replaces GB/T 17767.1-1999 "Organic - inorganic Compound Fertilizers - Determination of total nitrogen content." the main difference between this version and the GB/T 17767.1-1999 are.

--- Sodium hydroxide standard titration solution from 0.1mol/L to 0.5mol/L;

--- The calculation formula of total nitrogen content was rewritten.

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Standardization Technical Committee and soil conditioners Fertilizers (SAC/TC105) and focal point responsible for the interpretation.

This section drafted by. National Fertilizer Quality Supervision and Inspection Center (Shanghai).

1 Scope

GB/T 17767 provisions of this part of the organic - inorganic compound fertilizer by determination of total nitrogen content.

This section applies to by a variety of organic fertilizer and chemical fertilizer composed of solid organic - inorganic compound, also suitable for a variety of solid organic Determination of the total nitrogen content of fertilizers.

2 Normative references

The following documents contain provisions which, through reference GB/T 17767 in this section, constitute provisions of this part. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

Preparation of GB/T 8571 compound fertilizer laboratory samples GB/T 8572 after distillation of the total nitrogen content in compound fertilizer titration HG/T 2843 fertilizer products for chemical analysis commonly used standard titration solution, standard solution, reagent solution and indicator solution Principle 3 Reduction in the acidic medium of ammonium nitrate, in the presence of a catalyst or mixing hydrogen peroxide with concentrated sulfuric acid digestion, the conversion of nitrogen Ammonium sulfate. Distilled from an alkaline solution of ammonia, sulfuric acid and absorbed in excess of the standard titration solution, methyl red - methylene blue mixing means it shows the presence of liquid sodium hydroxide standard titration solution back titration.

4 Reagents and materials

Warning --- reagent hydrogen peroxide is corrosive and oxidation resistance, and sulfuric acid solution, hydrochloric acid and sodium hydroxide solution is corrosive Nature, related operations should be carried out in a fume hood. This section does not indicate that all possible security issues, the user has the responsibility to take appropriate safety and health practices and to ensure compliance with the conditions relevant national regulations.

As used in this section reagent solution and water, in the specifications and method of preparation is not specified, it shall comply with the provisions of HG/T 2843's.

4.1

Chromium powder. fineness of less than 250 μ m;

4.2

potassium sulfate;

4.3

copper sulfate pentahydrate;

4.4

Preparation of the mixed catalyst. 50g to 1000g of potassium sulfate and copper sulfate pentahydrate thoroughly mixed and ground carefully;

4.5

sulfuric acid;

4.6

hydrochloric acid;

4.7

hydrogen peroxide;

4.8

Sodium hydroxide solution. 400g/L;

4.9 Sulfuric acid solution. Ba (12H₂SO₄

) = 0.5mol/L or Ba (12H₂SO₄) = 1mol/L;

4.10 sodium hydroxide standard titration solution. Ba (NaOH) = 0.5mol/L;

4.11 methyl red - methylene blue mixed indicator solution;

4.12 wide pH test paper;

4.13 grease.