

ICS 65.080

CCS G20



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

GB/T 10209.1-2008

Replacing GB/T 10209.1-2001

**Determination of monoammonium phosphate and diammonium
phosphate - Part 1: Total nitrogen content**

磷酸一铵、磷酸二铵的测定方法 第1部分：总氮含量

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Foreword

GB/T 10209 "monoammonium phosphate, diammonium phosphate determination method" is divided into four parts.

--- Part 1. total nitrogen content;

--- Part 2. phosphorus content;

--- Part 3. Water;

--- Part 4. granularity. This part of GB/T 10209 Part 1. This Part replaces GB/T 10209.1-2001 "MAP, DAP total nitrogen content after distillation titration." The main difference between this version and the previous version are.

--- Standard name from "MAP, DAP total nitrogen content after distillation titration" to "monoammonium phosphate, diammonium phosphate The measuring method - Part 1. total nitrogen content ";

--- Increased content security warning. 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), Liuguo Chemical Corporation. The main drafters of this section. business according to Cong, yellow Feng, Zhou Yongming, Mu Yongfeng, Yang. This section was first released in 1988 and 2001, the first revision. MAP, DAP measurement method Part 1. total nitrogen content

1 Scope

GB/T 10209.1-2008 is the Chinese national standard on determination of monoammonium phosphate and diammonium phosphate - part 1: total nitrogen content, in the field of agriculture. 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 17 June 2008 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 September 2008. Classification: ICS 65.080, CCS G20. 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.

This section GB/T 10209 specifies the determination of MAP, DAP total nitrogen content of the titration after distillation. This section applies to all kinds of technology, the monoammonium phosphate, diammonium phosphate determination of total nitrogen content.

2 Normative references

The following documents contain provisions which, through reference

GB/T 10209 in this section constitute provisions of this section. 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.

GB/T 2441.1-2008 Determination of urea - Part 1. total nitrogen content

HG/T 2843 fertilizer products for chemical analysis commonly used standard titration solution, standard solution, reagent solution and indicator solution Principle

3 Distilled from an alkaline solution of ammonia absorption with excess sulfuric acid solution, methyl red - methylene blue under mixed indicator solution exists hydroxide Sodium Standard Solution back titration.

4 Reagents and materials

The following part-corrosive reagents and solutions, the operator should be careful! As should be rinsed with water or splashed on the skin immediately for Way to deal with severe cases should be treated immediately. 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 Ammonium sulfate. excellent pure, CAS No. 7783-20-2, before use at 105 °C drying to constant weight; Hydrochloric acid solution was 4.2. 1 + 1;

4.3 Sodium hydroxide solution. 400g/L;

4.4 sulfuric acid solution. Ba (12H₂SO₄) ~0.5mol/L or Ba (12H₂SO₄) ~1mol/L;

4.5 sodium hydroxide standard titration solution. $C(\text{NaOH}) = 0.5\text{mol/L}$;

4.6 methyl red - methylene blue mixed indicator solution;

4.7 wide pH test paper.

5 Instruments

5.1 usually laboratory instruments;

5.2 Distillation Apparatus., or distillation apparatus such as GB/T 2441.1-2008 other as shown in FIG. 1 have the same effect Nitrogen;

5.3 Splash Bar. a length of about 100mm, about 5mm diameter glass rod, and one end of a length of about 25mm polyethylene tube sets;

5.4 Distillation heater. 1000W ~ 1500W electric stove, placed in the lift carriage, adjustable height freedom. You can also use an electric furnace thermostat Or other forms of heat can adjust the intensity of the heat source.