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

GB 10205-2009

Replacing GB 10205-2001

Monoammonium phosphate and diammonium phosphate

磷酸一铵、磷酸二铵

(English Translation)

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Foreword

The standard Chapter 4, Section 6, Chapter 7 and Chapter 8 in 8.1 are mandatory, others are recommended.

This standard replaces GB 10205-2001 "monoammonium phosphate and diammonium phosphate." the main difference between this version and GB 10205-2001 are.

--- According to the status and monoammonium phosphate production process conditions and the level of physical quality of DAP phosphate resources of MAP, DAP-soluble phosphorus and water accounted for the percentage of phosphorus and other indicators have been adjusted.

Since the implementation of standards from products manufactured should implement the new standards; six months after the date of implementation of the standard, the market monoammonium phosphate, diammonium phosphate production Product packaging prohibit labeling GB 10205-2001.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee and soil conditioners Fertilizers (SAC/TC105) centralized.

1 Scope

This standard specifies the solid monoammonium phosphate (MAP) and diammonium phosphate (DAP) fertilizer product classifications, requirements, test methods, inspection regulations Then, labeling, packaging, transportation and storage.

This standard applies to all kinds of technology, the use of solid MAP and DAP fertilizer.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 6679 General rules for sampling solid chemical products GB/T 8170-2008 revised value represents about rules and limit values and judgment GB 8569 solid chemical fertilizers Packaging GB/T 10209.1 monoammonium phosphate, diammonium phosphate measurement method Part 1. total nitrogen content GB/T 10209.2 monoammonium phosphate, diammonium phosphate measurement method Part 2. phosphorus content GB/T 10209.3 monoammonium phosphate, diammonium phosphate measurement method - Part 3. Water GB/T 10209.4 monoammonium phosphate, diammonium phosphate measurement method - Part 4. size GB 18382 fertilizer identify the content and requirements

3 Product Categories

MAP and DAP product by the appearance of granular and powdered into two categories, according to the production process is divided into two categories.

3.1

by slurry MAP and DAP. magnesium, iron, high aluminum content of low grade phosphate rock as raw material, the slurry was concentrated legal system Monoammonium phosphate, diammonium phosphate.

3.2

MAP and DAP traditional method. the use of other methods than the slurry concentration was monoammonium phosphate, diammonium phosphate.

4 Requirements

4.1

Traditional method of granular MAP and DAP should meet the requirements of Table 1, and shall comply with the indicated values.

Table 1 Traditional Law granular MAP and DAP requirements

project

Monoammonium phosphate and diammonium phosphate Excellence in goods 12-52-0 First grade 11-49-0 Qualified 10-46-0 Excellence in goods 18-46-0 First grade 15-42-0 Qualified 14-39-0 Appearance granular, free of mechanical impurities Total nutrient (N + P₂O₅) mass fraction /% $\geq$ 64.0 60.0 56.0 64.0 57.0 53.0 Total Nitrogen (N) mass fraction /% $\geq$ 11.0 10.0 9.0 17.0 14.0 13.0 Phosphorus (P₂O₅) mass fraction /% $\geq$ 51.0 48.0 45.0 45.0 41.0 38.0 Accounting phosphorus soluble phosphorus percentage /% $\geq$ 87 80 75 87 80 75 Water (H₂O) mass fraction a /% $\leq$ 2.5 2.5 3.0 2.5 2.5 3.0 Size (1.00mm ~ 4.00mm) /% $\geq$ 90 80 80 90 80 80 a water recommended requirements.

4.2

by slurry granular MAP and DAP should meet the requirements of Table 2, to be consistent with the value indicated.

Table 2 by slurry granular MAP and DAP requirements

project

MAP slurry by slurry method DAP Excellence in goods 11-47-0 First grade 11-44-0 Qualified 10-42-0 Excellence in goods 16-44-0 First grade 15-42-0 Qualified 14-39-0 Appearance granular, free of mechanical impurities Total nutrient (N + P₂O₅) mass fraction /% $\geq$ 58.0 55.0 52.0 60.0 57.0 53.0 Total Nitrogen (N) of the mass fraction /% $\geq$ 10.0 10.0 9.0 15.0 14.0 13.0 Phosphorus (P₂O₅) mass fraction /% $\geq$ 46.0 43.0 41.0 43.0 41.0 38.0 Accounting phosphorus soluble phosphorus percentage /% $\geq$ 80 75 70 80 75 70 Water (H₂O) mass fraction a /% $\leq$ 2.5 2.5 3.0 2.5 2.5 3.0 Size (1.00mm ~ 4.00mm) /% $\geq$ 90 80 80 90 80 80 a water recommended requirements.

Powdered MAP 4.3 shall comply with the requirements of Table 3, but shall comply with the indicated values.

Table 3 powdered MAP requirements

project

Traditional Law slurry method Excellence in goods 9-49-0 First grade 8-47-0 Excellence in goods 11-47-0 First grade 11-44-0 Qualified 10-42-0 Appearance powder, no agglomeration, no mechanical impurities Total nutrient (N + P₂O₅) mass fraction /% $\geq$

58.0 55.0 58.0 55.0 52.0 Total Nitrogen (N) mass fraction /% $\geq$ 8.0 7.0 10.0 10.0 9.0
 Phosphorus (P₂O₅) mass fraction /% $\geq$ 48.0 46.0 46.0 43.0 41.0 Accounting phosphorus
 soluble phosphorus percentage /% $\geq$ 80 75 80 75 70 Fraction a /% water (H₂O) Quality $\leq$
 3.0 4.0 3.0 4.0 5.0 a water recommended requirements.

4.4

Table 1, Table 2 and Table 3 below for each grade level with the formula for a typical-fit, companies can produce other complex formula Products, total nitrogen and phosphorus allow negative 1.0% absolute deviation between the indicated value and all projects should comply with the appropriate level of the table Claim. If you do not press the indicated grade level that corresponds to the total nutrient determination.

5.1 Appearance

Determination visual method.

5.2 Determination of total nitrogen

According to GB/T 10209.1 performed.

5.3 Determination of phosphorus and phosphorus-soluble phosphorus accounted for percentage calculation According to GB/T 10209.2 performed.

5.4 Determination of Moisture

According to GB/T 10209.3 performed.

5.5 Determination of particle size

According to GB/T 10209.4 performed.

6.1 Test categories and test items

Product testing to factory inspection, test items for the entire project in Chapter 4.

6.2 Batch

Product batches tested to yield one or two days a group, the largest quantities of 1000t.

6.3.1 Bagged product

Not more than 512 bags, according to Table 4 to determine the number of sampling bags; bags of greater than 512, according to equation (1) results to determine the minimum number of sampling bags, in case Decimals, is entered as an integer.

Minimum number of sampling bags = $3 \times \text{Sang } N(1)$ where.