

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

**SN/T 0736.2-2011**

Replacing SN/T 0736.2-1997

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**Test method of import and export fertilizers. Part 2:  
Determination of moisture**

进出口化肥检验方法 第2部分：水分的测定

**(English Translation)**

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### Foreword

This section drafted in accordance with GB/T 1.1-2009 requirements given.

SN/T 0736 "Importers fertilizer test methods" standard series is divided into 14 parts.

- Part 1. sampling and sample preparation;
- Part 2. Determination of moisture;
- Part 3. Determination of particle size;
- Part 4. Flame atomic absorption spectrometric method for the determination of sodium content;
- Part 5. Determination of nitrogen content;
- Part 6. Determination of phosphorus;
- Part 7. Determination of potassium content;
- Part 8. Determination of shrinkage diurea content;
- Part 9. Determination of chlorine content;
- Part 10. Determination of the free acid;
- Part 11. automatic analyzer nitrogen content;
- Part 12. Determination of Arsenic, chromium, cadmium, mercury, lead by inductively coupled plasma mass spectrometry;
- Part 13. Flame atomic absorption spectrometric method for the determination of copper, zinc, iron, manganese, magnesium, cobalt, nickel content;
- Part 14. Determination of Inorganic anions by ion chromatography.

This is Part 2 SN/T 0736 "Importers fertilizer test methods" series of standards.

The partial replacement of SN/T 0736.2-1997 "Importers fertilizer test method Determination of moisture." this section 0736.2-1997 compared with SN/T , the main differences.

--- This standard GB/T 1.1 "Standardization Guide Part 1. Standard structure and writing rules" and GB/T 20001.4-2001 "Rules for drafting standards - Part 4. Chemical analysis methods," the provisions of the original SN/T 0736.2-1997 is formatted the specification of the changes and additions;

--- This section increases the Karl Fischer method in the method.

This section proposed and managed by the National Certification and Accreditation Administration Committee.

## 1 Scope

This section provides an oven drying, vacuum oven drying, vacuum drying method and Karl Fischer method for the determination of the import and export of fertilizers Methods of moisture.

This section applies to a method of oven drying method for the determination of stable performance, non-crystalline water chemical fertilizers, such as potash (potassium sulfate, potassium chloride, nitrate Potassium), nitrogen (ammonium sulfate and sodium nitrate, ammonium chloride) and a portion of phosphorus (superphosphate) and other measuring moisture content;

This part of the second method applicable to the determination of the thermal performance is not stable chemical fertilizers in a vacuum oven drying method, such as urea, compound fertilizer, ammonium nitrate Determination of lime nitrogen and moisture content;

This section Method three measuring thermal properties of highly unstable chemical fertilizers vacuum drying method for drying agent, such as ammonium hydrogen phosphate measured water CONTENT;

Method IV This section applies to extraction with dioxane fertilizer free water, followed by Karl Fischer reagent titration method, determination of fat Free water content of the feed.

## 2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

Preparation of GB/T 601 chemical reagent standard titration solution GB/T 6283 Water Chemical Products Karl Fischer method (General method) (ISO 760, NEQ) SN/T 0736.1 fertilizer import and export inspection methods of sampling and sample preparation

### 3 Instrument

#### 3.1

Oven. The temperature can be controlled at  $(105 \pm 2) ^\circ\text{C}$ .

#### 3.2

Aluminum Case. Diameter 40mm ~ 50mm, height 25mm equivalent size or glass weighing bottle.

#### 3.3

vacuum oven. Temperature range.  $40 ^\circ\text{C} \sim 240 ^\circ\text{C}$ , vacuum degree. 0.1kPa ~ 101kPa (1mmHg = 0.133kPa).

#### 3.4

vacuum dryer. with phosphorus pentoxide, magnesium perchlorate or barium chloride desiccant.

#### 3.5

Karl Fischer titration instruments directly by GB/T 6283 equipment.

### 4 Reagents

#### 4.1

in the standard reagent solution and water, in the specifications and method of preparation is not specified, it shall comply with the provisions of GB/T 601's.

#### 4.2

methanol. water content quality score  $\leq 0.05\%$ , if the water content of the mass fraction  $> 0.05\%$ , was added to 500mL of methanol 5A stars Molecular sieve (4.6) of about 50g, stuffed with cork, allowed to stand overnight, to learn to use the supernatant.

#### 4.3

dioxane. dehydration treatment method with 4.2.

#### 4.4

ethanol. dehydration treatment method with 4.2.

#### 4.5

Karl Fischer reagent. According to GB/T 6283 preparation.