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

SN/T 0736.7-2010

Replacing SN/T 0736.7-1999

**Test method for import and export fertilizers. Part 7:
Determination of potassium content**

进出口化肥检验方法 第7部分：钾含量的测定

(English Translation)

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Foreword

SN/T 0736 "Importers fertilizer test method" includes 12 separate 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.

This section SN/T Section 70736 of.

The partial replacement of SN/T 0736.7-1999 "Import and Export Inspection and potassium fertilizers Determination," and SN/T 0736.7-1999 phase Ratio, the main changes are as follows.

--- According to GB/T 1.1-2000 "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 structure of the original standard has been modified;

--- Instruments and equipment in an oven and increase the analytical balance, and accuracy requirements are described;

--- Increasing the blank test weight method;

--- Gravimetric method drying time from 1h Change 1.5h;

--- Precision of expression for specification changes.

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

1 Scope

SN/T 0736 provisions of this part of the determination of the import and export of fertilizers potassium content.

This section applies to the determination of potassium chloride, potassium sulfate fertilizer and other import and export of fertilizers and potassium content.

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.

GB/T 6682 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) SN/T 0736.1 fertilizer import and export inspection methods of sampling and sample preparation

3 Sampling and sample preparation

Sampling and sample preparation by SN/T 0736.1 performed.

4 Reagents and materials

Unless otherwise indicated, the reagents used were of analytical grade, the water at least three water requirements of GB/T 6682 stipulated.

4.1

aluminum hydroxide.

4.2

hydrochloric acid ($\rho = 1.19\text{g/cm}^3$). mass fraction of about 38%.

4.3

Disodium ethylenediaminetetraacetate (EDTA) solution (100g/L). 10g of EDTA was dissolved in 100mL water.

4.4

Sodium hydroxide solution (200g/L). 20g of sodium hydroxide was dissolved in 100mL water.

4.5

phenolphthalein indicator (5g/L). 0.5g was dissolved in 100mL of phenolphthalein indicator in 95% ethanol (volume fraction) of.

4.6

formaldehyde solution ($\rho = 1.1\text{g/cm}^3$). mass fraction most about 37%.

4.7

sodium tetraphenylborate (25g/L). Weigh 6.25g sodium tetraphenyl boron in the 400mL beaker, 200mL of water was added to dissolve Solution, 5g of aluminum hydroxide was added and stirred for 10min, filtered through filter paper slowly. As filtrate turbidity, filtration must be repeated until clear. Collect all Ministry filtrate was 250mL flask, add 1mL sodium hydroxide solution (4.4), dilute with water to volume, and mix aside. If necessary, use Before re-filtered.

4.8

sodium tetraphenylborate lotion (1g/L). Take 40mL sodium tetraphenylborate solution (4.7), diluted with water to 1L.

4.9

hydrochloric acid solution ($\rho = 1.05\text{g/cm}^3$). mass fraction of about 4.3%. Take 10mL hydrochloric acid (4.2), diluted with water to 100mL.

4.10

Titan yellow indicator (0.4g/L). 40mg was dissolved in 100mL of water titan yellow.

4.11

potassium chloride standard solution (K_2O content of 2mg/mL). Weigh accurately 1.5830g pre-drying to constant weight basis at 105 °C Potassium chloride, add water to dissolve and transferred to 500mL volumetric flask, dilute to volume, and mix. This solution containing 2mg per ml of potassium hydroxide (K_2O).

4.12

Sodium tetraphenylborate (STPB is) standard solution (12g/L). Weigh 12g sodium tetraphenyl boron in the 600mL beaker was added 400mL Water for dissolution, 10g of

aluminum hydroxide, stirred for 10min, filtered through filter paper slowly. As filtrate turbidity, filtration must be repeated until clear.

Collect all the filtrate in 1L flask, add 4mL sodium hydroxide solution (4.4), dilute to the mark, mix and let stand 48h, press Calibration method.

Accurate Pipette 25mL potassium chloride standard solution (4.11) in 100mL flask, followed by adding 5mL hydrochloric acid solution (4.9),