

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

SN/T 0736.9-2010

Replacing SN/T 0736.9-1999

**Chemical analysis of fertilizers for import and export. Part 9:
Determination of choride ion content**

进出口化肥检验方法 第9部分：氯含量的测定

(English Translation)

Issued on: November 1, 2010

Implemented on: May 1, 2011

Issued by: General Administration of Customs

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Method summary
- 4 Reagents
- 5 Apparatus

Foreword

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

SN/T 0736 "Importers fertilizer test methods" consists of 12 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;
- Part 8. Determination of shrinkage diurea content;
- Part 9. Determination of chlorine content;
- Part 10. Determination of the free acid;
- Part 11. automatic analyzer ammonia content;
- Part 12. Determination of Arsenic, chromium, cadmium, mercury, lead by Inductively Coupled Plasma Mass Spectrometry.

Part is divided into 9 parts.

This part is the SN/T 0736.9-1999 "Determination of the import and export of fertilizers chlorine content inspection methods," the first amendment.

0736.9-1999 "Determination of fertilizer import and export inspection method chlorine

content" Since the implementation of this section instead of the SN/T .

This section compared with the SN/T 0736.9-1999, the main changes are as follows.

--- According to "GB/T 1.1-2009 for standardization - Part 1. Standard structure and drafting", "GB/T 20001.4-Section 42001 Rules for drafting standards. chemical analysis methods, "part of the original structure has been modified;

--- To increase the scope of the normative reference standards;

--- Summary of the method, reagents, instruments and equipment, measurement step, precision changes and additions titration method.

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

1 Scope

SN/T 0736 This section specifies the method of fertilizer import and export of chloride (Cl-) content determination.

This section applies to NPK fertilizer, potassium sulfate compound fertilizer, potassium sulfate determination, sodium nitrate (potassium), ammonium nitrate fertilizer in chlorine 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, undated references, the latest edition (including any amendments) applies to this document.

Preparation of GB/T 601 chemical reagent standard titration solution Preparation of standard solution of GB/T 602 Determination of impurities in chemical reagents GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) SN/T 0736.1 fertilizer import and export inspection methods of sampling and sample preparation

3 Method summary

In the sample solution slightly acidic, add quantitative silver nitrate solution, the chlorine ions become precipitation of silver chloride, ammonium ferric sulfate to indicate Agents, titrate the excess silver nitrate with ammonium thiocyanate standard, calculated according to the amount of ammonium thiocyanate chlorine content.

4 Reagents

Except as otherwise provided in this section, the reagents used were of analytical grade, laboratory water should be at least in line with GB/T 6682 in three water Requirements.

4.1

Working Standard reagent sodium chloride (NaCl).

4.2

nitric acid (11).

4.3

silver nitrate solution. $c(\text{AgNO}_3) = 0.1\text{mol/L}$, 17g of silver nitrate was weighed, dissolved in water, diluted to 1L, stored in a brown Bottle.

4.4

ammonium ferric sulfate $[\text{Fe}(\text{NH}_4)(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}]$ solution. dissolve 40g ammonium ferric sulfate in 100mL water, adding 2mL Nitric acid, so that the disappearance of brown, store in ground plug small mouth glass bottles, spare.

4.5

chlorine standard solution (1mg/mL). Weigh accurately 1.6487g burning after 550 °C ~ 600 °C 40min ~ 50min and drying work as a reference reagent sodium chloride (NaCl) (4.1) in the beaker, dissolved in water and transferred to 1L volumetric flask, dilute to the mark, shake, stored in Plastic bottle. It can also be GB/T 601 and GB/T 602 preparation, or direct use of certified reference materials.

4.6

ammonium thiocyanate standard solution [$c(\text{NH}_4\text{CNS}) = 0.1\text{mol/L}$]. formulated with reference to the provisions of GB/T 601 and GB/T 602 standard and set. Which weighed 7.6g ammonium thiocyanate dissolved in water and diluted to 1L, Appendix A can also be calibrated.

5 Apparatus

5.1

laboratory sample grinder or mortar.