

ICS 71.060.50
CCS G 12



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

GB/T 6276.2-2010

Replacing GB/T 6276.2-1986

**Determination of ammonium hydrogen carbonate for industrial
use -- Part 2: Chloride content -- Potentiometric titration method**

工业用碳酸氢铵的测定方法 第2部分：氯化物含量 电位滴定法

(English Translation)

Issued on: June 30, 2010

Implemented on: January 1, 2011

Issued by: Standardization Administration of China

Table of Contents

Foreword

1 Scope

2 Normative references

4 Reagents and materials

Foreword

GB/T 6276 "industrial use - Determination of ammonium bicarbonate method" is divided into nine sections.

- Part 1. ammonium bicarbonate content of acid-base titration;
- Part 2. potentiometric titration of chloride content;
- Part 3. sulphide content Visible turbidimetric method;
- Part 4. sulphate content Visible turbidimetric method;
- Part 5. ash content by weight method;
- Part 6. iron content - Phenanthroline spectrophotometric method;
- Part 7. arsenic content diethyl dithiocarbamate silver spectrophotometry;
- Part 8. arsenic content Gutzeit method;
- Part 9. heavy metal content Visible turbidimetric method.

This part of GB/T 26276 Part of.

Appendix A of this section is an informative annex.

This Part replaces GB/T 6276.2-1986 "ammonium chloride for industrial use - Determination of potentiometric titration." this portion of the GB/T 6276.2-1986 The main differences are.

- Reagent solution, standard titration solution preparation and calibration methods such as the implementation of HG/T 2843 standards;
- Measuring electrode selection chloride ion selective electrode;
- Increasing the parallel determination results allow poor regulations.

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Standardization Technical Committee centralized fertilizer and soil

conditioner.

This section drafted by. National Fertilizer Quality Supervision and Inspection Center (Shanghai).

1 Scope

GB/T 6276 This section specifies the determination by potentiometric titration of chloride in industrial ammonium bicarbonate content.

This section applies to the determination of ammonium chloride content industry.

2 Normative references

The following documents contain provisions which, through reference to GB/T 6276 to the present, 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.

HG/T 2843 fertilizer products for chemical analysis commonly used standard titration solution, standard solution, reagent solution and indicator solution Principle 3 in acetone (or ethanol) in acidic solution of silver ions, chloride ion-selective electrode or a silver - sulfide electrode is a measuring electrode, calomel electrode as reference electrode, titration with standard silver nitrate titration, potentiometric titration to determine the end point jump.

4 Reagents and materials

Reagents and solutions following the flammable and corrosive, the operator should be careful as splashed on the skin should immediately wash with water and, if Suited immediate medical attention.

This part of the 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

acetone.

4.2 95% ethanol.

4.3 30% hydrogen peroxide.

4.4

nitric acid solution, 6mol/L.

4.5

saturated solution of potassium nitrate.

4.6

sodium carbonate solution, 5%.

4.7

potassium chloride standard solution, 0.1mol/L. Accurately weigh 3.728g pre-dried at 130 °C to constant quality potassium chloride (reference Reagent), weighing accuracy of 0.0002g, beaker, add water to dissolve transferred to 500mL volumetric flask, dilute to the mark with water, shake spare.

4.8

potassium chloride standard solution. 0.005mol/L, draw 5mL potassium chloride standard solution (4.7), placed in 100mL volumetric flask, dilute with water Release to the mark.

4.9

standard silver nitrate titration solution, $c(\text{AgNO}_3) = 0.1\text{mol/L}$.

4.10

standard silver nitrate titration solution, $c(\text{AgNO}_3) = 0.005\text{mol/L}$.

4.10.1 Formulated

Draw 5mL standard silver nitrate titration solution (4.9), placed in 100mL flask, diluted with water to the mark.

4.10.2 Calibration

Draw 5mL potassium chloride standard solution (4.8), placed in 150mL beaker, add water, 5mL, add a drop of bromophenol blue indicator solution, a solution of nitrate Acid solution of about 1 to 2 drops of the solution is just a yellow. Then add 30mL acetone, placed in an electromagnetic stirrer, the beaker was placed in an electromagnetic stirrer