

ICS 71.060.50
CCS G 12



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

GB/T 6276.4-2010

Replacing GB/T 6276.4-1986

**Determination of ammonium hydrogen carbonate for industrial
use -- Part 4: Sulphate content -- Visible turbidimetric method**

工业用碳酸氢铵的测定方法 第4部分：硫酸盐含量 目视比浊法

(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

5 Step, Analysis

5.2 Determination

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 46276 Part of.

This Part replaces GB/T 6276.4-1986 "industrial use - Determination of ammonium sulphate content Visible turbidimetric method." this portion of the GB/T 6276.4-1986 The main differences are.

--- Reagent solution, standard titration solution preparation and calibration methods such as the implementation of HG/T 2843 standard.

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 provides the use of visual turbidimetry industrial sulfate content of ammonium bicarbonate.

This section applies to the determination of ammonium sulfate 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 Under acidic conditions, the test solution was added to a solution of barium chloride, barium sulfate turbidity generated by white aerosols generated with standard turbidity Determined by comparing the content of sulfate.

4 Reagents and materials

The following part-corrosive and toxic reagents, the operator should be careful as splashed on skin, immediately wash with water, if not it should be treated immediately.

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

chloroform;

4.2

barium chloride solution, 5%;

4.3

hydrochloric acid solution, 11%;

4.4

sulfate standard solution in terms of SO_4 , 0.1mg/mL. Weigh 0.148g at 105 °C ~ 110 °C dried to constant mass in dry Sodium sulfate, dissolved in water and transferred to 1000mL

volumetric flask, dilute to the mark.

5 Step, Analysis

Preparation 5.1 turbidity standard Number of branches in 50mL colorimetric tube were added 0mL, 0.5mL, 1.0mL, 1.5mL3.5mL sulfate standard solution, add Into 0.5mL hydrochloric acid, add water to about 40mL.

5.2 Determination

Weigh 5g ~ 10g sample (accurate to 0.1g), placed in 250mL beaker, add water to dissolve 80mL, slowly heated and boiled by the best two Carbon monoxide and ammonia, after cooling transferred 50mL colorimetric tube, add 0.5mL hydrochloric acid solution, add water to 40mL, and standard pipe at the same time continue to shake Fixed barium chloride solution was added dropwise 5mL diluted with water to 50mL, shake placement 20min, and the turbidity standard for comparison.

If the sample contains anti-caking agent a vegetable oil fatty acid, 5g ~ 10g sample weighed (to the nearest 0.1g), placed in a beaker, added 80mL dissolved in water transferred to 150mL separating funnel, add 20mL of chloroform, shaken vigorously for 5min ~ 10min, allowed to stand, let After separation, the release of the lower chloroform phase, the upper aqueous phase was transferred to 250mL beaker was slowly heated and boiled by the best carbon dioxide and ammonia, cold