

ICS 71.060.50

CCS G 12



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

GB/T 6276.9-2010

Replacing GB/T 6276.9-1986

**Determination of ammonium hydrogen carbonate for industrial
use -- Part 9: Health metal content -- Visible turbidimetric
method**

工业用碳酸氢铵的测定方法 第9部分：重金属含量 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 96276 Part of.

This standard replaces GB/T 6276.9-1986 "industrial use - Determination of ammonium bicarbonate heavy metal content Visible turbidimetric method." this portion of the GB/T 6276.9-1986 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 heavy metal content of ammonium bicarbonate.

This section applies to the determination of ammonium bicarbonate content of heavy metals for industrial use.

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 weakly acidic conditions, hydrogen sulfide solution was added to the test solution, the test solution with the heavy metal sulfide is generated, and then lead into the turbidity standard Line compared to determine heavy metals (as Pb) content.

4 Reagents and materials

The following part-corrosive agents, such as careful operator shall immediately wash with water splashed on the skin, severe cases should be immediately treatment.

This standard 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

aqueous ammonia solution, 23.

4.2

hydrochloric acid solution, 11.

4.3

acetic acid solution, 1mol/L.

4.4

hydrogen sulphide saturated aqueous solution.

4.5

lead standard solution, 1mg/mL.

4.6

lead standard solution, 0.01mg/mL. accurately diluted 100-fold with lead standard solution (4.5), only that day.

4.7

pairs nitrophenol indicator solution.

5 Step, Analysis

Preparation 5.1 turbidity standard in six 50mL colorimetric tube were added 0mL, 1.0mL, 2.0mL, 3.0mL, 4.0mL, 5.0mL lead standard solution (4.6), the solution was added 2mL of acetic acid, diluted with water to approximately 35mL.

5.2 Determination

Weigh 10g sample (accurate to 0.1g), placed in 250mL beaker, add 50mL water, slowly heated to boiling by-doing and carbon dioxide Ammonia was added 2mL of hydrochloric acid solution, then heated to boiling 5min, add 1 drop of Nitrophenol indicator solution was cooled, dropping ammonia solution to the test solution just Good yellow and transferred to 50mL colorimetric tube, add 2mL acetic acid solution and diluted with water to approximately 35mL, 10mL added simultaneously with the standard tube Hydrogen sulphide saturated aqueous solution was diluted with water to the mark, shake well placed after 10min, and the turbidity standard for comparison.