

ICS 71.060.50

CCS X35



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

GB/T 13025.6-2012

Replacing GB/T 13025.6-1991

**General test method in salt industry - Determination of calcium
and magnesium**

制盐工业通用试验方法 钙和镁的测定

Issued on: June 29, 2012

Implemented on: December 1, 2012

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Determination of calcium (volumetric method)
- 3.2 Reagents

Foreword

This section of the standard method of series universal testing in salt industry, which is currently divided into the following series of standards section 13 and, if necessary, other test Standard test method will complement the development of the follow-up work.

- GB/T 13025.1 General test method in salt industry Determination of particle size;
- Determination of GB/T 13025.2 General test method in salt industry whiteness;
- GB/T 13025.3 Determination of Salt Industry General Test Method for Water;
- Determination of GB/T 13025.4 General test method in salt industry of insoluble matter;
- GB/T 13025.5 Determination of Salt Industry General test methods of chloride ion;
- GB/T 13025.6 Determination of common salt industry test methods for calcium and magnesium;
- GB/T 13025.7 Determination of General test method in salt industry iodine;
- Determination of GB/T 13025.8 General test method in salt industry sulfate radical;
- Determination of GB/T 13025.9 common salt industry test methods for lead;
- Determination of GB/T 13025.10 General test method in salt industry ferrocyanide roots;
- GB/T 13025.11 General test method in salt industry - Determination of Fluoride;
- Determination of GB/T 13025.12 General test method in salt industry barium;
- GB/T 13025.13 Determination of common salt industry test methods for arsenic. This section GB/T 13025 Part 6. This section based on GB/T 1.1-2009 of rules for the preparation. This Part replaces GB/T 13025.6-1991 "Universal salt industry test methods for the determination of calcium and magnesium ions," and this section GB/T 13025.6-1991 Except as compared to editorial changes, the major technical changes are as follows:

1 Scope

GB/T 13025.6-2012 is the Chinese national standard on general test method in salt industry - determination of calcium and magnesium, in the field of chemical technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 29 June 2012 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 December 2012. Classification: ICS 71.060.50, CCS X35. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

GB/T 13025 provisions of this part of the determination of salt products and salt chemical products of calcium and magnesium. Part 3 of Chapter

4 Capacity Act applies to product and salts and determination of calcium and magnesium salt chemical products raw materials; Chapter 5 atoms Absorption spectrophotometry applied to micro calcium salt products, the determination of magnesium by atomic absorption spectrophotometry detection limit of. calcium 0.05mg/kg, Magnesium 0.05mg/kg.

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. Laboratory use specifications and test methods GB/T 6682-2008 Analysis

3 Determination of calcium (volumetric method)

3.1 Principle Sample solution was made basic (pH~12), with disodium edetate (EDTA) titration standard solution titration, determination of calcium content.

3.2 Reagents

3.2.1 Reagents Specifications Unless otherwise indicated in the analysis using only confirm three analytical grade reagents and water

GB/T 6682-2008 stipulated.

3.2.2 hydrochloric acid solution (4mol/L) Measure 20mL of hydrochloric acid was added 40mL of water, and mix.

3.2.3 sodium hydroxide solution (2mol/L) Saturated solution of sodium hydroxide (100g

sodium hydroxide plus 100mL water) prepared in advance after placing clarified supernatant take 52mL, Diluted with water to 500mL.

3.2.4 ammonia - ammonium chloride buffer solution (pH~10) 20g ammonium chloride was weighed, dissolved in water, was added 100mL aqueous ammonia (25%), diluted with water to 1L.

3.2.5 standard solution of zinc oxide Weigh 1.63g ignition at 800 °C to constant weight of zinc oxide reference reagents, weighing accuracy of 0.0001g, placed in 150mL beaker, with less The amount of water wetting, dropping hydrochloric acid solution (3.2.2) until completely dissolved and transferred to 1000mL volumetric flask, diluted with water to the mark. Concentration of standard solution of zinc oxide according to formula (1).