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

GB/T 13025.13-2012

Replacing GB/T 13025.13-1994

General test method in salt industry - Determination of arsenic

制盐工业通用试验方法 砷的测定

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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 Part of 1,313,025. This section based on GB/T 1.1-2009 of rules for the preparation. This Part replaces GB/T 13025.13-1994 "General test method in salt industry - Determination of arsenic ions," and this section GB/T 13025.13-1994 addition to editorial changes as compared to the outer main changes are as follows:

1 Scope

GB/T 13025.13-2012 is the Chinese national standard on general test method in salt industry - determination of arsenic, 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 arsenic salt products. This section applies to the determination of arsenic salt products.

2 Normative references

The following documents for the application of this document is essential, dated references, only the dated version suitable for use herein Member, undated references, the latest edition (including any amendments) applies to this document. Laboratory use specifications and test methods GB/T 6682-2008 Analysis

3 General Provisions

Unless otherwise indicated in the analysis using only confirm two analytical grade reagents and water GB/T 6682-2008 stipulated.

4 Hydride generation atomic absorption spectrophotometry

4.1 Principle Arsenic and sodium borohydride reaction of arsine in an acidic solution, load electric quartz absorption tube of the argon atoms absorb 193.7nm resonance line, the absorption values under fixed conditions and proportional to the amount of arsenic, compared with standard series quantitation.

4.2 Reagents

4.2.1 hydrochloric acid solution (11) Measure 250mL of concentrated hydrochloric acid, dissolved in 250mL water.

4.2.2 Potassium Iodide - thiourea solution Weigh 2.0g of potassium iodide and 0.20g of thiourea in 50mL beaker, add water, 10mL, micro heat to dissolve, when equipped with the new.

4.2.3 a solution of sodium borohydride (15g/L) Weigh 1.50g of sodium borohydride and 0.30g of sodium hydroxide dissolved in 100mL of water, equipped with the new time.

4.2.4 hydrochloric acid solution (199) Amount of 5.0mL of concentrated hydrochloric acid was dissolved in 495mL of water. This solution was used as the carrier liquid.

4.2.5 arsenic standard solution (0.1mg/mL) Accurately weigh 0.1320g by 105 °C drying 2h or more and set the dryer to cool to room temperature arsenic trioxide (As_2O_3) in 100mL beaker, 10mL sodium hydroxide solution (100g/L), to be dissolved, with phenolphthalein as an indicator, with 10% sulfuric acid and then