Chinastandards.org

SN

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3370-2012

Determination of arsenic, mercury in tungsten ore. Atomic fluorescence spectrometric method

钨矿中砷、汞含量的测定 原子荧光光谱法

(English Translation)

Issued on: December 12, 2012 **Implemented on: July 1, 2013**

Issued by: General Administration of Customs

Preview: page 1 of 4 shown, 5 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3370-2012

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Normative references

3 Method summary

4 Reagents

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard is proposed and managed by the National Certification and Accreditation Administration Committee.

This standard was drafted. People's Republic of China Zhejiang Exit Inspection and Quarantine.

1 Scope

This standard specifies the method of analysis of tungsten ore of arsenic, mercury content by atomic fluorescence spectrometry.

This standard applies to the determination of tungsten ore of arsenic, mercury content in the measured lower limit. arsenic and 0.20mg/kg, mercury 0.09mg/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.

Preparation of standard solution of GB/T 602 Determination of impurities in chemical reagents Laboratory use specifications and test methods GB/T 6682 Analysis

3 Method summary

Samples with hydrochloric acid, nitric acid digestion, arsenic and potassium borohydride reaction of volatile hydrides, mercury and potassium borohydride reaction in a particular medium Generate atomic mercury, loaded by argon quartz atomizer, under arsenic, mercury hollow cathode lamp irradiation, emit a characteristic wavelength of fluorescence, which fluorescence Light intensity and determination of element content is proportional to

Preview: page 2 of 4 shown, 5 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3370-2012

the fluorescence intensity of the standard series of comparative quantitative analysis.

4 Reagents

Unless otherwise indicated in the analysis using only analytical grade reagents and in line with GB/T 6682 secondary water.

4.1
nitric acid (rho = 1.19g/mL).

4.2
hydrochloric acid (rho = 1.42g/mL).

4.3
potassium borohydride. pure class distinctions.

4.4
Potassium hydroxide. pure class distinctions.

4.5
hydrochloric acid solution (595, volume fraction). Measure 50mL of hydrochloric acid (4.2), diluted with water to 1000mL, shake.

4.6
tartaric acid solution (20%). Weigh 20.0g of tartaric acid, dissolved in water and diluted with water to 100mL.

4.7
potassium borohydride (1.0%) mixed solution. Weigh 1.25g of potassium hydroxide (4.4) into a beaker, dissolved in a small amount of water, weighed 2.5g Boron Potassium hydride (4.3) into a potassium hydroxide solution, dissolved in water and diluted to 250mL, and mix with a time of existing service.

4.8
potassium borohydride (0.01%) mixed solution. Weigh 0.0125g of potassium hydroxide (4.4) into a beaker, dissolved in a small amount of water, weighed 0.025g of potassium borohydride (4.3) into a potassium hydroxide solution, dissolved in water and diluted to 250mL, and mix with a time of existing service.

4.9
Pre reducing agent solution (10% thiourea, 10% ascorbic acid). Weigh 10.0g of thiourea and 10.0g ascorbic acid dissolved in water, diluted with water Diluted to 100mL, the time is now equipped with.

Preview: page 3 of 4 shown, 5 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3370-2012

Chinastandards.org

4.10

As, Hg single element standard stock solution (1000μg/mL). Each standard solution according to GB/T 602 method of preparation, or directly National Standard purchased.

4.11

arsenic standard solution. take arsenic standard stock solution (4.10) added to the pre-reducing agent solution (4.9) so that all the pre-standard series solution also Reducing agent concentration of 1%, progressively diluted hydrochloric acid solution (4.5) into 0.0,2.0,4.0,6.0,8.0,10.0μg/L, the time is now equipped with.

Preview: page 4 of 4 shown, 5 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3370-2012