Chinastandards.org

ICS 83.140
CCS G40

SN

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3714-2013

Quantitative screening of cobalt, arsenic, chromium, tin and lead in rubber and plastic products. Inductively coupled plasma atomic emission spectrometry

橡胶和塑料制品中钴、砷、铬、锡和铅的定量筛选方法 电感耦合等离子体原子发射光谱法

(English Translation)

Issued on: November 6, 2013 **Implemented on: June 1, 2014**

Issued by: General Administration of Customs

Preview: page 1 of 3 shown, 7 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3714-2013

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Normative references

3 Method summary

4 Reagents and materials

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, Shenzhen People's Republic of China Entry-Exit Inspection and Quarantine Bureau.

1 Scope

This standard specifies the inductively coupled plasma atomic emission spectrometry for quantitative screening of rubber and plastic products, cobalt, arsenic, chromium, tin and lead Measurement method.

This standard applies to tire rubber, silicone rubber, polyethylene (PE), polycarbonate (PC), polypropylene (PP), polystyrene (PS), polyvinyl chloride Ene (PVC), acrylonitrile - butadiene - styrene (ABS) cobalt, arsenic, chromium, tin and lead determination. Determination of the standard cobalt, arsenic, chromium, tin and lead Lower limit (the LOQ) were 5mg/kg, 10mg/kg, 5mg/kg, 10mg/kg, 10mg/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 all amendments) used in the present 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 GB/T 8170 repair value expressed about the rules and limit values and judgment

Preview: page 2 of 3 shown, 7 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3714-2013

3 Method summary

By microwave digestion sample, test solution by inductively coupled plasma atomic emission spectroscopy after digestion Determination, external standard.

4 Reagents and materials

Unless otherwise specified, all reagents superior grade pure water test water should meet the two requirements of GB/T 6682 stipulated.

4.1
nitric acid (rho = 1.42g/mL, 65%).

4.2
Hydrogen peroxide (rho = 1.10g/mL, 30%).

4.3
fluoroborate (rho = 1.84g/mL, 48%).

4.4
nitric acid (595). Take nitric acid (4.1) 5mL was added to 95mL of distilled water and mix.

4.5
Nitrate (595) - fluoroborate (298). nitric acid were taken (4.1) 5mL, fluoroboric acid (4.3) 2mL of distilled water was added to 93mL and mix well.

4.6
single element stock standard solution. Standard solution of cobalt, arsenic, chromium, tin, and lead elements prepared according to GB/T 602 methods, or directly Element standard solution standard substance certificate within the validity period. Cobalt, arsenic, chromium, lead and tin concentration standard solution were 1000μg/mL.

4.7
mixed standard solution. Pipette respectively cobalt, arsenic, chromium, tin and lead single element standard stock solution (4.6) 10.00mL placed in 100mL capacity

Preview: page 3 of 3 shown, 7 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3714-2013