

ICS 87.010
CCS G50

SN

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

SN/T 3713-2013

**Screening of chromium pigment in paints-Inductively coupled
plasma atomic emission spectrometry
(English Translation)**

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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 drafted.

1 Scope

This standard specifies the inductively coupled plasma atomic emission spectrometry method for screening the chromium coating pigments.

This standard applies to screening paint chrome yellow, lead chromate, molybdenum, chromium and red pigments.

This standard does not apply to chrome green paint.

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 GB/T 8170 repair value expressed about the rules and limit values and judgment GB/T 23942 Chemicals inductively coupled plasma atomic emission spectrometry General

3 Method Summary

After the paint were coated and dried by microwave digestion method to remove all organic material, after constant volume by inductively coupled plasma atomic emission Spectrometry, chromium content is calculated according to the curve.

4 Reagents and materials

Unless otherwise indicated, the reagents used were of analytical grade standard, distilled or deionized water should be consistent with GB/T 6682 two water requirements.

4.1

nitric acid ($\rho = 1.42\text{g/mL}$).

4.2

Hydrogen peroxide ($\rho = 1.10\text{g/mL}$).

4.3

Chromium standard solution. the concentration of chromium $1000\mu\text{g/mL}$ standard solution prepared according to GB/T 602 method, or direct use of Chromium standard solution reference material certificate within the validity period.

5 Instruments

5.1

Inductively coupled plasma atomic emission spectrometer, the reciprocal linear dispersion rate stability (short-range, long-range), and the background equivalent concentration detection limit, the calibration curve shall comply with GB/T 23942 of. Instrument conditions, see informative Annex A.

5.2

microwave digestion. Microwave digestion temperature control routine samples see informative Annex B.

5.3

Balance. a sense of the amount of 0.1mg .