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

SN/T 2003.7-2011

**Screening method of lead, mercury, cadmium, chromium and
bromine in electrical and electronic equipments. Part 7: Laser
induced breakdown spectroscopy**

(English Translation)

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Foreword

SN/T 2003 series of standards is divided into seven sections.

--- Electrical and electronic products - Determination of lead, mercury, cadmium, chromium, bromine Part 1. X-ray fluorescence spectroscopy qualitative screening

--- Electronic and Electrical Products Determination of polybrominated biphenyls and polybrominated diphenyl ethers - Part 2. Infrared spectroscopy qualitative screening

--- Electrical and electronic products - Determination of lead, mercury, cadmium, chromium and bromine - Part 3. X-ray fluorescence spectroscopy quantitative screening method

--- Electrical and electronic products - Determination of lead, mercury, chromium, cadmium and bromine - Part 4. energy dispersive X-ray fluorescence spectroscopy qualitative screening

--- Electrical and electronic products - Determination of lead, mercury, chromium, cadmium and bromine - Part 5. energy dispersive X-ray fluorescence spectrometry quantitative screening method

--- Electronic and Electrical Products qualitative screening methods lead, mercury, cadmium, chromium Part 6. spark source emission spectrometry

--- Electrical and electronic products - Part 7 Determination of lead, mercury, cadmium, chromium, bromine. laser-induced qualitative screening this is Part 7 SN/T 2003 series of standards.

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

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

1 Scope

SN/T 2003 This section specifies the electrical and electronic products, lead, mercury, cadmium, chromium, bromine laser induced breakdown spectroscopy qualitative screening methods.

This section applies to electrical and electronic products, qualitative screening of lead, mercury, cadmium, chromium, bromine.

2 Method summary

The samples were prepared under the conditions of qualitative filter elements with laser-induced breakdown spectroscopy were determined to be collected to map Analysis to determine whether there is analyte based on the elements characteristic peaks.

3 Terms

The following terms and definitions apply to this document.

Laser-induced breakdown spectroscopy Laser-induced breakdown spectrometry; LIBs an instant high-energy laser bombardment items so bombarded to produce articles plasma emits a continuous spectrum and optical characteristics of the article Spectrum, the method according to the material characteristics of the excitation spectrum of the component analysis.

4 Instrument

4.1

Laser-induced breakdown spectroscopy, spectrometer operating conditions and parameters, see Appendix A.

4.2

cutting machine.

4.3

Freezer Mill.

4.4

mill.

4.5

tableting machine, the pressure of not less than 20t.

4.6

fusion machine.

5 Reagents and materials

Helium. purity of greater than 99.99%.

6.1.1 Preparation of a homogeneous sample

The product to be tested to split homogeneous sample, such as polymers, metal materials are substantially uniform homogeneous sample, in line with the size