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

GB/T 26125-2011

**Electrical and electronic products -- Determination of six regulated
substances (lead, mercury, cadmium, hexavalent chromium,
polybrominated biphenyls, polybrominated diphenyl ethers)**

(English Translation)

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Foreword

This Standard is formulated in accordance with the rules in GB/T 1.1-2009.

This Standard uses translation method to equivalently adopt IEC 62321.2008

"Electrotechnical

products - Determination of six regulated substances (Lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl, polybrominated diphenyl ethers)".

This Standard makes the following editorial changes.

- In order to be consistent with our existing national standard series, the standard name is changed to "Electrical and electronic products - Determination of six regulated substances (Lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl, polybrominated diphenyl ethers)";

- According to the latest development of international standards, the IEC/PAS document that was

not explicitly specified in NOTE 1 of Clause 1 of the original text is clearly changed to IEC/PAS

62596.2009; add a reference document IEC/PAS 62596.2009 in Normative Reference;

- According to the latest development of international standards, the reference document IEC/TS

62476 in NOTE 2 of the original text is changed to IEC/TR 62476.2009;

- For the convenience of users to understand and use of the standard, add NOTE to "trace metals"

grade.

Our national documents that are corresponding to the international documents quoted in the

Normative References of this Standard are as follows.

- GB/T 6682-2008 Water for analytical laboratory use. Specification and test methods (ISO 3696.1987, MOD).

This Standard shall be under the jurisdiction of the China Electrical & Electronics Products and

Systems, Environmental Standardization Technical Committee (SAC/TC297).

Drafting organizations of this Standard. China Electronics Standardization Institute, 5th Electronic

Institute of Ministry of Industry and Information Technology, Ningbo Entry-Exit Inspection and

Quarantine Bureau, Jiangsu Entry-Exit Inspection and Quarantine Bureau, Shenzhen Academy of

Metrology and Quality Inspection, Shenzhen Entry-Exit Inspection and Quarantine Bureau, Guangdong Entry-Exit Inspection and Quarantine Bureau, and Carolina Technology (Beijing)

Limited.

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1 Scope

This Standard specifies the determination of the levels of lead (Pb), mercury (Hg), cadmium (Cd),

hexavalent chromium (Cr(VI)), and two types of brominated flame retardants - polybrominated

biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) that are contained in electrical and

electronic products.

2 Normative references

The following referenced documents are indispensable for the application of this Standard. For dated

documents, only the specific edition apply. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 27025-2008 General requirements for the competence of testing and calibration laboratories (GB/T 27025-2008, ISO/IEC 17025:2005, IDT)

3 Terms, definitions and abbreviations

calibration standard substance in solid or liquid form with known and stable concentration(s) of the

analyte(s) of interest used to establish instrument response (calibration curve) with respect to

analyte(s) concentration(s)

4 Test methods - Overview

This Standard refers to the sample as the object to be processed and measured according to the

test methods to determine the levels of the regulated substances. A sample can either be a polymer,

a metal or electronics.

5 Mechanical sample preparation

This can be demonstrated by processing and analyzing certified reference materials and blanks

before or after processing a material known to contain significant levels of regulated substances.

Manual cutting is suitable for rough cutting and preparation of samples for further reduction.

Recommended maximum sample sizes are listed below, but will depend on the specification of the

equipment used in the subsequent preparation processes.

6 Screening by X-ray fluorescence spectrometry (XRF)

When applying this method to electronics "as received", which, by the nature of their design, are not

uniform, care shall be taken in interpreting the results. Similarly, the analysis of Cr in conversion

coatings may be difficult due to the presence of Cr in substrate material and/or because of insufficient

sensitivity for Cr in typically very thin (several hundred nm) conversion coating layers.

7 Determination of mercury in polymers, metals and electronics by CV- AAS, CV-AFS,