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**General disassembly requirements for testing hazardous
substances in electrical and electronic products
(English Translation)**

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Foreword

It is proposed to divide this disassembly standard system into general requirements and specific requirements for certain products, AND this guidance technical document is for the general disassembly requirements for all electrical and electronic products and their components.

Appendix A of this guidance technical document is an informative appendix,
and Appendix B is a normative appendix.

This guidance technical document was proposed by the National Standardization Administration and the State Administration of Quality Supervision, Inspection and Quarantine.

This guidance technical document shall be under the jurisdiction of the National Electrical and Electronic Products and Systems Environmental Standardization Working Group.

This guidance technical document is responsibly drafted by China Quality Certification Center; AND the participating drafting organizations include.

Shimadzu Corporation, Shenzhen Center Testing International Group, Ltd., Haier Group, Motorola (China) Electronics Co., Ltd., Shenzhen Metrology & Quality Inspection Institute, Nanjing Entry-Exit Inspection and Quarantine Bureau, China CEPREI Laboratory, Ministry of Information Industry Telecom Research Institute, China Electronic Technology Standardization Institute, China Electrical Equipment Industry Association, China Tondar Certification & Testing Technology Co., Ltd, Kunshan City Product Quality Supervision and Inspection Institute.

1 Scope

This guidance technical document specifies general principles for the disassembly of electrical and electronic products and their components and materials.

The scope of application of this guidance technical document is electrical and electronic products and their components and materials.

2 Terms and definitions

The following terms and definitions apply to this guidance technical document.

Electrical and electronic products it refers to the products that rely on current or electromagnetic fields to function properly AND are designed for use in equipment that generates, transmits, AND measures such currents and magnetic fields at AC voltages not exceeding 1000 V and DC voltages not exceeding 1500 V.

Hazardous substances it refers to the chemical substances such as lead, mercury, cadmium, hexavalent chromium, polybrominated diphenyl ethers and polybrominated biphenyls, which may be hazardous to health and the environment, as specified in relevant laws and regulations.

Mechanical disassembly it refers to the process of effectively dividing and obtaining the testing unit through mechanical means, including unscrewing, cutting, scraping, extrusion and grinding. In this guidance technical document, it is abbreviated as disassembly.

4.1 When submitting the obtained homogeneous test unit for testing, it shall

take sample away from the connection part, AND select the test unit of larger body for sampling.

4.2 As for the test units with a mass greater than 100 g or an area greater than 100 mm x 100 mm, it shall take samples from different locations, including at least one geometric center point and two diagonal edge points.

4.3 When submitting the obtained non-homogeneous test unit for testing, it shall

make overall sampling as practical as possible.

5.1 Disassembly of whole machine

As for the whole machine type electronic product which can independently realize some functions, firstly DISASSEMBLE it into modules or components;

then in accordance with the requirements of 5.2 and 5.3, CONDUCT further disassembly.

5.2 Disassembly of modules and components

As for the module or component type electrical and electronic products and devices which are composed more than one element or mechanical component, firstly DISASSEMBLE it into elements; then in accordance with the requirements of 5.3, further DISASSEMBLE it into homogeneous material test unit.

5.3 Disassembly of component

As for the element type products with a certain electrical and electronic function, further DISASSEMBLE it into homogeneous material test unit.

5.4 Confirmation of homogeneous material

As for raw materials, such as polymer materials (without surface treatment), metal materials (without surface treatment), auxiliary materials (solder, flux, adhesives, inks, coatings), etc., they are considered as homogeneous material, AND can be submitted directly for testing.

5.5 Disassembly of material after surface treatment

B.3.3 The part of the tool which is in direct contact with the disassembly object shall be with component identification. During disassembly, it shall not use the tools containing the element under testing to contact the disassembly object.

Note: Before put into use, it shall understand the contents of the relevant substances in the tool.

B.4 Containers

The test unit after being disassembled shall be isolated and contained by appropriate containers, AND preserved in room temperature and dry environment. The container shall be kept clean.

B.5 Sample contamination protection in the whole disassembly process, it shall fully assess the effect of such factors as environment, tool, and operation, etc., onto the composition and content of the relevant hazardous substance in the sample, AND take appropriate measures to eliminate such effects OR otherwise minimize such effects.

B.6 Description of product before disassembly Before disassembly, it shall use text or photographing, etc., to make appropriate description and records of the product, AND keep such records.

B.7 Cleaning or decontamination, storage and transfer of samples B.7.1 The sample may contain impurities such as dust, oil, etc. which may affect the results of the test, so before disassembly, it shall conduct necessary cleaning or decontamination; BUT the cleaning reagent and decontamination method shall not change the sample composition.

B.7.2 Samples shall be stored for a specified period of time and under suitable conditions.

B.7.3 The transfer of the sample shall be such that the composition is stable.

B.8 Recording and storage of the disassembly process B.8.1 Requirements for documentation the sample shall be uniquely identified, AND the disassembly procedure shall be completely recorded, including the disassembly environment, the disassembly device and the tool, the disassembly result, the sample identification, and other relevant information requiring special records.

B.8.2 Record form