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

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**Technical requirement for environmental labeling products.
Camera
(English Translation)**

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Foreword

To implement the Environmental Protection Law of the People's Republic of China, reduce the environmental and human health of camera products during production, use and disposal.

Kang influence, the development of this standard.

This standard proposes the contents of the camera product design, production process, environmental characteristics of the product components and the contents of the public information.

begging.

This standard is the first release.

Appendix A of this standard is a normative appendix.

This standard applies to China Environmental Labeling Product Certification.

This standard was formulated by the Science and Technology Standards Department of the Ministry of Environmental Protection.

This standard is mainly drafted by. China-Japan Friendship Environmental Protection

Center, Tongbiao Standard Technology Service Co., Ltd., Canon (China) Co., Ltd.

Division, Nikon Imaging Instruments Sales (China) Co., Ltd., Matsushita Electric (China) Co., Ltd., Tianjin Samsung Optoelectronics Co., Ltd.

This standard was approved by the Ministry of Environmental Protection on March 2, 2011.

This standard has been implemented since April 1, 2011.

This standard is explained by the Ministry of Environmental Protection.

Environmental labeling product technical requirements camera

1 Scope of application

This standard specifies the terms and definitions, basic requirements, technical content and test methods of camera environmental labeling products.

This standard applies to cameras and does not include mobile phones and other devices with camera functions.

2 Normative references

The contents of this standard refer to the terms in the following documents. For undated references, the valid version applies to this standard.

GB/T 2900.41 Electrotechnical terminology primary battery and battery GB/T 13964 photographic machinery terminology GB/T 16288 logo for plastic products GB/T 18287-2000 General specification for lithium ion batteries for cellular phones GB/T 18455 packaging recycling mark SJ/T 11363 Limitation requirements for toxic and hazardous substances in electronic information products

3 Terms and definitions

The terms and the following terms in GB/T 2900.41, GB/T 18287-2000 apply to this standard.

Camera

A device that records an image of a subject on a photoreceptor or a storage medium through a lens.

4 Basic requirements

4.1

Product quality should meet the requirements of the corresponding quality standards.

4.2

Pollutant emissions from product manufacturing enterprises shall comply with the requirements of national or local pollutant discharge standards.

4.3

Product manufacturers should strengthen clean production in the production process.

5.1 Product Design Requirements

5.1.1

The product adopts a detachable design.

5.1.2

Optical lenses used in the product shall not use lead (Pb) and its compounds as formula ingredients.

5.1.3 Plastic parts requirements

5.1.3.1

The content of vinyl chloride monomer in the outer shell of the product shall not exceed 1 mg/kg; the phthalates listed in Appendix A shall not be used as A plasticizer in which no more than four types of polymers, copolymers or polymerization mixtures are used and should be easily decomposed.

5.1.3.2

Plastic parts with a mass exceeding 25 g and a surface area exceeding 200 mm² shall be in accordance with the requirements of GB/T 16288.

mark.

5.1.3.3

Decabromodiphenyl ether (DBDPO), short-chained chlorinated paraffins (SCCPs) shall not be used.

5.2 Battery requirements

5.2.1

After charging and discharging 300 times as a power source, the remaining capacity of the lithium ion rechargeable battery should be greater than 80% of its rated capacity.

5.2.2

The limit of heavy metals in the single-cell lithium-ion rechargeable battery as the power supply shall meet the requirements of Table 1.

Table 1 Limited units of heavy metals in batteries. mg/kg

Project Lead (Pb) Cadmium (Cd) Mercury (Hg) Single power battery ≤ 40 ≤ 20 ≤ 5

5.3 Limitation requirements for hazardous substances in products

Lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr6), polybrominated biphenyls (PBBs) and polybrominated diphenyls in products and product components the limits for six hazardous substances (PBDEs) should meet the requirements of SJ/T 11363, with the following exceptions.

- a) The case where lead is used in ceramics of electronic ceramic parts.
- b) When lead is applied as an alloy component to a steel alloy and its content (mass fraction) is $\leq 0.35\%$.
- c) When lead is used as an alloy component in an aluminum alloy, and its content (mass fraction) is $\leq 0.4\%$.
- d) When lead is used as a component of an alloy in a copper alloy and its content (mass fraction) is $\leq 0.4\%$.
- e) Lead is used as a soldering alloy for microprocessor pins and package connections, and its content (mass fraction) is 80% to 85%.
- f) The case where lead is used in the operation of a solder alloy for connection in a flip-chip package of an integrated circuit.
- g) The case where lead is used in the glass of an LCD flat fluorescent lamp.

5.4 Production process requirements

5.4.1

Methylene chloride (CH_2Cl_2) should not be used as a cleaning solvent in the production of optical lenses.

5.4.2

Lead-free soldering process should be used during assembly and connection of product parts.

5.4.3

Hydrochlorofluorocarbons (HCFCs), 1,1,1-trichloroethane ($\text{C}_2\text{H}_3\text{Cl}_3$), trichloroethylene (C_2HCl_3), dichloroethane should not be used.

(CH_3CHCl_2), chloroform (CHCl_3), bromopropane ($\text{C}_3\text{H}_7\text{Br}$), n-hexane (C_6H_{14}), toluene (C_7H_8), xylene [$\text{C}_6\text{H}_4(\text{CH}_3)_2$] the substance is used as a cleaning solvent.