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

HJ 567-2010

**Technical requirement for enviromental labeling products. Ink
for ink jet printing**

环境标志产品技术要求 喷墨墨水

(English Translation)

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Foreword

To implement the Environmental Protection Law of the People's Republic of China, reduce the health and circulation of inkjet inks during production, use and disposal.

This standard is developed to promote the production and use of low toxicity, low volatility inkjet inks.

This standard mainly refers to the ink regulations in the Japanese eco-label "ink box" (No. 142) and other standards, combined with domestic inkjet ink the technical status and product environmental characteristics of water production enterprises are formulated.

This standard sets forth requirements for hazardous materials, packaging, and public information in inkjet inks.

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. Environmental Development Center of the Ministry of Environmental Protection, Printed Imaging Application Branch of China Computer Users Association, Beijing Green Color Business Culture Development Center, Shandong Limei Color Inkjet Water Co., Ltd., Beijing Caiyun Digital Technology Co., Ltd., Shanghai Yingwei Inkjet Technology Company, Shenyang Golden Sun Digital Technology Co., Ltd., Epson (China) Co., Ltd., Yiyang Qicai Technology Development Co., Ltd., Zhu Haibao Tax Zone Natural Baojie Digital Technology Materials Co., Ltd., Zhuhai Nasida Enterprise Management Co., Ltd., Zhuhai Meiluda Printer Consumables Limited Company, Guangdong Dongguan Yinkejie Nano Inkjet Products Co., Ltd., China Hewlett-Packard Co., Ltd., Canon (China) Co., Ltd.

This standard was approved by the Ministry of Environmental Protection on March 10, 2010.

This standard has been implemented since June 1, 2010.

This standard is explained by the Ministry of Environmental Protection.

Environmental Labeling Products Technical Requirements Inkjet Ink

1 Scope of application

This standard specifies the terms and definitions, basic requirements, technical content and testing methods of inkjet ink environmental labeling products.

This standard applies to inks used in inkjet devices.

This standard does not apply to radiation-curable inkjet inks.

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 16483 Material Safety Data Sheet Contents and Project Order GB 18582-2008 Limits of harmful substances in interior wall coverings for interior decoration materials GB/T 15962-2008 ink terminology HJ/T 201-2005 Environmental Labeling Products Technical Requirements Waterborne Coatings HJ/T 370-2007 Environmental Labeling Products Technical Requirements Offset Printing Inks HJ/T 371-2007 Environmental Labeling Products Technical Requirements Gravure Ink and Flexo Printing Inks

3 Terms and definitions

The following terms and definitions apply to this standard.

Inkjet ink for ink jet printing it refers to a dispersion system composed of components such as a coloring agent, a binder, and an auxiliary agent, and is transferred to a coloring matter on a substrate during an inkjet process.

(GB/T 15962-2008)

Colorant

Refers to the colored substance that imparts the color of the inkjet ink. (GB/T 15962-2008)

3.3 Water-based inkjet ink Refers to inkjet inks that use water as the primary dissolution or dispersion medium.

Solvent-based ink for ink jet ink Refers to an inkjet ink that uses an organic solvent as a dissolution or dispersion medium.

Volatile organic compound, VOC Refers to any organic compound whose initial boiling point is lower than or equal to 250 ° C under a pressure of 101.3 kPa. (HJ/T 371-2007)

4 Basic requirements

4.1

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

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 Technical content

5.1

The substances listed in Table 1 shall not be artificially added to the product.

Table 1 No artificial addition of substances in products

Serial number

1 Selenium (Se), nickel (Ni), arsenic (As), antimony (Sb) and other elements and their compounds a

2 Prohibition of the use of glycol ethers b

3 Phthalates b

4 isophorone

5 hydroquinone

a Except for nickel complexes with a molecular weight of more than 10,000 in the colorant.

b Glycol ethers and phthalates are listed in Table A.1 of Appendix A.

5.2

The colorants in Table A.2 and Table A.3 of Appendix A shall not be used in the products.

5.3

The colorants used in the product shall not decompose the aromatic amines listed in Table A.4 of Appendix A under reducing conditions.

5.4

The limit of harmful substances of water-based inkjet inks shall comply with the requirements of Table 2.

Table 2 Limits of harmful substances in water-based inkjet inks

Project limit

Ammonia and its compounds /% ≤ 2 Volatile Organic Compounds /% ≤ 30
 Formaldehyde/(mg/kg) ≤ 500 Methanol /% ≤ 0.3 Phenol/(mg/kg) ≤ 100 Total amount of
 lead, cadmium, chromium, mercury/(mg/kg) Lead/(mg/kg) Cadmium/(mg/kg)
 Chromium/(mg/kg) Mercury/(mg/kg) ≤ 100 ≤ 90 ≤ 75 ≤ 60 ≤ 60

5.5

The limit of harmful substances of solvent-based inkjet inks shall comply with the requirements of Table 3.

Table 3 Limits of harmful substances in solvent-based inkjet inks

Project limit

Methanol /% ≤ 0.3
 Halogenated hydrocarbon solvent/(mg/kg) ≤ 500 Benzene, toluene, ethylbenzene and
 xylene/(mg/kg) ≤ 500 Total amount of lead, cadmium, chromium, mercury/(mg/kg)
 Lead/(mg/kg) Cadmium/(mg/kg) Chromium/(mg/kg) Mercury/(mg/kg) ≤ 100 ≤ 90 ≤ 75
 ≤ 60 ≤ 60

5.6 Packaging Materials and Design Requirements

a) Polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE) and chlorinated paraffins (chain carbon) shall not be added to the plastic packaging containers of the products.

The number is 10 to 13, and the chlorine content is 50% or more.

b) Plastic packaging containers containing lead, cadmium and mercury should not be added to the plastic packaging containers of the products.

c) The product packaging container should be recyclable.

5.7 The enterprise shall provide the user with the product safety technical specification in accordance with the requirements of GB 16483. The safety technical specification shall include the following Rong.

a) Disposal recommendations for leakage and residual product should be provided to the user.

b) It should be emphasized that the product must be stored away from children and marked