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HJ

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

HJ 424-2017

Replacing HJ/T 424-2008

**Technical requirement for environmental labeling products.
Digital copying(including multi-function)devices
(English Translation)**

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Table of Contents

Foreword	
1 Scope of application	.1
2 Normative references	.1
3 Terms and definitions	
4 Basic requirements	.2
5 Technical content	.2
6 Test methods	.4
Appendix A (Normative) Product Environmental Design Requirements	
Appendix B (Normative) Phthalates	.9
Appendix C (Normative) Polycyclic aromatic hydrocarbons (PAHs)	
Appendix D (Informative) TVOC, benzene, styrene and unidentified single VOC emission rate sample preparation process	.11
Appendix E (informative) Ozone emission rate sampling process	.15
Appendix F (informative) fine particle emission rate sample preparation process	

Foreword

In order to implement the "Environmental Protection Law of the People's Republic of China" and reduce the digital photocopying (including multi-functional) equipment in the process of production and use in the environmental impact, the development of this standard.

This standard digital copy (including multi-functional) equipment product design, production, use, recycling, packaging and description of the proposed Environmental protection requirements.

This standard reference to the German standard basis for environmental labeling Award (Basic Criteria for Award of the Environmental Label) "attached Office Equipment With Printing (Printer, Copier, Multifunction Device) "(Office Equipment With Printing Function (Printers, Copiers, Multi-function Devices)) (RAL-UZ 205,2017), "Technical Requirements for Environmental Labeling Products Word Multifunction Copying Equipment "(HJ/T 424-2008) was revised.

This standard compared with the HJ/T 424-2008 main changes are as follows.

- the name has been modified;
- Removed the definition of energy efficiency;

- Removed battery requirements;
- Removed toner and photoconductor requirements and added cartridge requirements - Added unidentified control indicators and limit values for VOC and fine particulate matter;
- Adjusted product energy efficiency index.

This standard is formulated by the Ministry of Environmental Protection Science and Technology Standards Division.

This standard is mainly drafted by. Environmental Protection Department of Environmental Development Center, the State Office Equipment and Supplies Quality Supervision and Inspection Center.

This standard MEP approved on December 11, this standard since March 1, 2018 into effect.

This standard is interpreted by the MEP.

This standard replaces the standards previously issued as follows.

- HJ/T 424-2008, HJ BZ 40-2000.

Environmental Labeling Product Technical Requirements Digital photocopying (including multifunction) equipment

1 Scope of application

This standard specifies the digital photocopying (including multi-function) equipment (hereinafter referred to as photocopying equipment) environmental labeling products category terms and Definition, basic requirements, technical content and testing methods.

This standard applies to black and white photocopying equipment, color photocopying equipment and to copy as its basic function of digital multi-function photocopying equipment.

2 Normative references

This standard references the following documents in the terms. For undated references, the effective version applies to this standard.

GB 21521 photocopiers, printers and fax machines energy efficiency rating and energy efficiency rating GB/T 13334 copier debug version A3 GB/T 16288 plastic products logo GB/T 18313 Acoustics Information technology Equipment and communication equipment - Measurement of airborne noise GB/T 18455 packaging recycling mark GB/T 21202 digital multi-function monochrome electrostatic copy (print) equipment GB/T 26572 electrical and electronic products limit the requirements of substances GB/T 29793 color copying (including multi-function) equipment HJ 570 Environmental Labeling Product Technical

Requirements Toner Cartridge HJ 2512 Environmental Labeling Product Technical
Requirements Printers, fax machines and multifunction machines ISO/IEC 28360
Information technology - Office equipment - Determination of chemical emission rates in
electronic equipment (Information technology - Office equipment - Determination of
chemical emission rates from electronic equipment)

3 Terms and definitions

The following terms and definitions apply to this standard 3.1 digital copying (including multi-function) equipment digital copying (including multi-function) devices by scanning the original image or text into digital signals and digital processing, the electrostatic imaging mode of copying Prepared, multifunctional is the simultaneous inclusion of one or more additional functions (such as printing, telephone, fax, scanning, networking, etc.).

3.2 Copy speed copying speed

Copying equipment per minute copy A4 page number of sheets of paper, the standard vc said unit. page/minute.

3.3 Print speed printing speed

Printing equipment with a copy of the A4-page printing paper per minute the number of pages, the standard vp said unit. page/minute.

3.4 Total volatile organic compounds (TVOC)

Analysis was performed using a non-polar column (Polarity Index less than 10) with retention time between n-hexane and n-hexadecane Organic compounds.

3.5 Fine particulate matter

Suspended in the air, aerodynamic diameter $\leq 2.5\mu\text{m}$ solid particles.

3.6 Dust dust

Suspended in the air, aerodynamic diameter $> 2.5\mu\text{m}$ solid particles.

4 Basic requirements

4.1

product quality should be consistent with GB/T 21202 or GB/T 29793 standards.

4.2

The pollutant discharge of the production enterprise shall comply with the discharge standards of pollutants stipulated by the state or local governments.

4.3

product manufacturing enterprises in the production process should be strengthened cleaner production.

5.1 Product Environmental Design Requirements

5.1.1

Product design should meet the requirements of Appendix A.

5.1.2

HBCDD and SCCPs are not used in printed circuit board (PCB) substrates.

5.1.3

Enclosures, protective components In addition to the heating and imaging components adjacent to plastic parts, the quality of more than 25g plastic parts are not used Chlorine-containing, bromine-containing polymers without the addition of a solution containing tris (2-chloroethyl) phosphate (TCEP), tris (2-chloropropyl) phosphate Tris (2,3-dichloropropyl) tartrate (TDCP), polybrominated biphenyls, polybrominated diphenyl ethers, hexabromocyclododecane (HBCDD), short-chained chlorinated paraffins (SCCPs) of the flame retardant.

5.1.4

Except for wire and cable, phthalates listed in Appendix B are not used as plasticizers in plastic parts of mass greater than 25g.

5.1.5

Tributyltin (TBT) and triphenyltin (TPT) are not used in product parts.

5.1.6

The total amount of benzo (a) pyrene in the product enclosure, all kinds of buttons and external power cord does not exceed 20 mg/kg, listed in Appendix C the total of 16 polycyclic aromatic hydrocarbons (PAHs) does not exceed.200 mg/kg.

5.1.7

Cartridges for products shall meet the requirements of 5.1, 5.2, 5.3, 5.5, 5.6 and 5.7 of HJ 570-2010.

5.2 Product production process requirements

5.2.1

Not using hydrofluorocarbons (HFCs), 1,1,1-trichloroethane (C₂H₃Cl₃), trichlorethylene (C₂HCl₃), dichloroethane (CH₃CHCl₂), dichloromethane (CH₂Cl₂), trichloromethane (CHCl₃), carbon tetrachloride (CCl₄), bromopropane (C₃H₇Br), Benzene, toluene, xylene,