Green Mark	**Digital Duplicators**	No. 99 Category No. A-09

1. Scope

This standard applies to the fully automatic ink-printing printers ("products") with digital printing functions.

2. Terms and definitions

For this standard, the following terms and definitions shall apply.

(1) **Disassemblability**: Refer to the requirement of Designed for Disassembly in Section 7.4 of *CNS 14021 Environmental labels and declarations -- Self-declared environmental claims* (Type II environmental labelling). The term "disassemblability" means the product with parts and components of different materials can be disassembled and separated using regular tools (such as a screwdriver) during the product's end-of-life treatment process.

(2) **Polybromobiphenyls (PBBs):** Include bromobiphenyl, dibromobiphenyl, tribromobiphenyl, tetrabromobiphenyls, pentabromobiphenyl, hexabromobiphenyls, heptabromobiphenyl, octabromobiphenyl, nonabromobiphenyl, and decabromobiphenyl.

(3) **Polybromodiphenyl ethers (PBDEs):** Include bromodiphenyl ether, dibromodiphenyl ether, tribromodiphenyl ethers, tetrabromodiphenyl ether, pentabromodiphenyl ethers, hexabromodiphenyl ethers, heptabromodiphenyl ethers, octabromodiphenyl ether, nonabromodiphenyl ether, and decabromodiphenyl ether.

3. Product characteristics

3.1 The product's one-hour electricity consumption (including producing masters) under the following conditions shall meet the criteria below.

Test conditions: Printing of one-page test page for one-hour continuously.

Items		**A3 size paper**		**B4 and A4 size paper**	
		Printer function in operation	**Printer function not in operation**	**Printer function in operation**	**Printer function not in operation**
Models with standard printer function		≦ 35.5W	≦ 28W	≦ 22W	≦ 20W
Models without standard printer function	**With optional printer functions**	≦ 35.5W	--	≦ 22W	--
	Without printer functions	--	≦ 24W	--	≦ 19W

3.2 The product shall be able to use recycled paper with at least 60% recycled content.

3.3 The product shall be disassemblable.

3.4 The product or its manufacturing processes shall not use substances stipulated by the Taiwan EPA as toxic substances, and substances controlled by the Montreal Protocol.

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4. Materials, accessories and components

4.1 The product's plastic components and parts shall not use halogenated plastics. Plastic components or parts weighing more than 25 g shall meet the requirements of ISO 11469 regarding labeling in prominent areas to indicate the composition code.

4.2 Product's plastic components or parts weighing more than 25 g shall not contain cadmium, lead, hexavalent chromium, mercury, polybromobiphenyls, polybromodiphenyl ethers and short-chain chlorinated paraffins, and their measured contents shall comply with the regulatory limits; if recycled materials are used in the parts or safety considerations require the addition of glass fiber to the parts, the parts' lead content shall be less than 20 mg/kg.

4.3 The product's attached labels/stickers shall be able to be separated from the product with ease, or they shall be made from the same material as the components they are attached to.

4.4 If the product uses a build-in battery, the battery's lead, cadmium and mercury contents shall comply with the regulatory limit.

5. Test methods and regulatory limits

The regulated substances and regulatory limits for this standard are listed below. The applicable test methods shall be the national, international or specific industry standard methods, and the test reports shall be issued by accredited professional testing organizations.

Applicable Part	Regulated Substance	Regulatory Limit	Referenced Test Method
Plastic	cadmium	＜2 mg/kg *	NIEA M353 NIEA M301 CNS 15050 US EPA 3051A US EPA 3050B US EPA 3052
Plastic	lead	＜2 mg/kg *	NIEA M353 NIEA M301 CNS 15050 US EPA 3051A US EPA 3050B US EPA 3052
Plastic	hexavalent chromium	＜3 mg/kg	NIEA T303 CNS 15050 US EPA 3060 US EPA 7196
Plastic	mercury	＜2 mg/kg *	NIEA M317 NIEA M318 CNS 15050 US EPA 7471 US EPA 7473 US EPA 3052
Plastic	polybromobiphenyls	＜10 mg/kg *	CNS 15050 US EPA 8270 IEC 62321
Plastic	polybromodiphenyl ethers	＜10 mg/kg *	CNS 15050 US EPA 8270

			IEC 62321
Plastic	short-chain chlorinated paraffins	＜10 mg/kg	US EPA 3540 US EPA 8081 US EPA 8082 US EPA 8270 IEC 62321
Built-in battery	lead	＜15 mg/kg	NIEA R315
Built-in battery	cadmium	＜5 mg/kg	NIEA R315
Built-in battery	mercury	＜0.25 mg/kg	NIEA R315

*: The test reports shall provide evidence that the employed test methods have detection limits of less than 1/3 of the regulatory limits.

6. Packaging

The materials of the product packaging shall meet the requirements of the *Guidelines on Review of Applications for Qualified Environmental Protection Products.*

7. Labeling

7.1 The name, address and consumer hotline of the Green Mark user shall be clearly marked on the product or packaging.

7.2 The product or packaging shall bear a label reading “Energy Saving” and "Low Pollution”.

Revision History:

First revision: January 6, 2009
Second revision: August 13, 2009
Third revision: January 25, 2017
Fourth revision: February 13, 2019