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

GB/T 29301-2024

Replacing GB/T 29301-2012

**Toner cartridges for electrostatic copying and multifunction
devices**

静电复印（包括多功能）设备用鼓粉盒

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Standardization Administration of China**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting is required. This document replaces GB/T 29301-2012 "Toner cartridges for electrostatic copying (including multi-function) equipment" and is compatible with GB/T 29301-2012 In comparison, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) The relevant contents in the scope have been changed (see Chapter 1, Chapter 1 of the.2012 edition);
- b) The contents in "Terms and Definitions" were changed (see Chapter 3, Chapter 3 of the.2012 edition);
- c) The technical requirements for "Appearance" and "Removal Force" have been changed (see 4.2 of the.2012 edition);
- d) The technical requirements and test methods for "running performance" have been changed (see 5.8 of the.2012 edition);
- e) Added the technical requirements of "Image quality requirements for printed products" in color (printing mode) (see Table 1);
- f) Added the "text clarity" requirement for black and white (in copy mode) printed products in the "printed product image quality" (see Table 1);
- g) Changed the technical requirements and test methods for toxic and hazardous

substances in "no risk of harm to health" (see 4.7.1, 5.12.1, 4.7.1, 5.12.1 of the.2012 edition);

h) The limit requirements for "pollutant emissions" have been changed (see 4.7.3, 4.7.3 of the.2012 edition);

1 Scope

China's national standard for the toner cartridges used in electrostatic copying and multifunction devices. It specifies the requirements, the test methods and the inspection rules for the cartridges that supply toner to a laser printer, copier or multifunction machine. A toner cartridge is bought without being able to test it and used until it is empty, and the machine it goes into was designed around the original manufacturer's cartridge. That is the whole commercial situation the standard addresses. A very large third-party and remanufactured cartridge industry exists, its products are physically interchangeable with the originals, and a purchaser has no way of knowing before use whether a cartridge will produce acceptable pages, how many of them, or what it will do to the machine. So the requirements are written around what the purchaser cannot check. The appearance and the removal force, which is whether the cartridge fits and comes out again without damaging the machine. The running performance, which is whether it works through its life rather than at the start. The image quality of the printed output, judged on defined test pages, which the 2024 edition extends: image quality requirements are added for colour in printing mode, and a text clarity requirement is added for black and white in copy mode. And the toxic and hazardous substance requirements, revised in this edition, which matter because a cartridge is a consumable that releases fine particles into an office and is discarded in very large numbers. The long implementation period - issued at the end of 2024 and in force from the beginning of 2026 - reflects the need for a market of many small suppliers to adapt. Issued on 31 December 2024 and in force since 1 January 2026, it replaces GB/T 29301-2012.

2 Temperature and humidity conditioning

GB/T 4857.5-1992 Drop test method for packaging and transport packages

GB/T 10073 Method for evaluating image quality of electrostatically printed products

GB/T 13963 Terminology of copying (including multi-function) equipment

GB/T 16483 Contents and item sequence of chemical safety data sheets

GB/T 21202 Digital multifunctional black-and-white electrostatic copying (printing) equipment

GB/T 22372 Monochrome laser printer test version GB/T 24988 Copy paper

GB/T 26572 Limit requirements for restricted substances in electronic and electrical products

GB/T 28625 Color copier test version

GB/T 28626 Method for evaluating image quality of color copiers

GB/T 29793 Color copying (including multi-function) equipment

GB/T 34969 Color Laser Printer Test Version

GB/T 34970 Test method for the quality of printed products of color laser printers

GB/T 39560 (all parts) Determination of certain substances in electrical and electronic products

JB/T 8273 Electrostatic Copying Black Test Plate

GB/T 2829 Periodic Inspection Attribute Sampling Procedure and Table (Applicable to the Inspection of Process Stability)

GB/T 4591 Electrostatic image test plate

GB/T 4857.2-2005 Basic tests for packaging and transport packages Part