

# Original HP Toner performance and durability



## Durability

Designed to deliver high-quality output, Original HP Toner Cartridges are specifically engineered to operate seamlessly with HP LaserJet printers. During the printing process, a vital stage occurs - the fusing process. The toner particles, comprised of a unique blend of plastic polymer and select additives, exhibit uniformity in both size and shape. The toner particles are heated until they melt, and subsequently, they adhere firmly onto the paper. This process is fine-tuned to uphold the high standards of product quality that HP maintains, with durability and toner archive ability being a significant aspect of this quality.

Toner archive ability, the toner's capacity to maintain its quality over time, is key for documents meant for long-term preservation. This archival feature ensures toner durability, preventing fading or smudging, preserving document readability, and guaranteeing long-lasting, high-quality prints.

## Durability testing

To ensure validity of claims related to print durability, HP LaserJet printers and Original HP Toner Cartridges undergo a series of rigorous tests, including:

- ISO 11798 standard: Many HP LaserJet printers and Original HP Toner Cartridges comply with the international ISO 11798 standard for permanence and durability. However, printer condition and environmental factors like heat and moisture can impact toner durability. The standard tests for lightfastness, water and wear resistance, and heat and folding tolerance. HP's ISO 11798 certificates, tested by RISE Research Institutes of Sweden AB. Active certificates can be found at RISE's public website <http://publiccert.extweb.sp.se/en/Product/List/1090>

- PTS testing: HP LaserJet printers and Original HP Toner Cartridges are subjected to the German DONot test, aimed at ensuring document authenticity and resistance to unnoticed changes. This test, conducted by independent Papiertechnische Stiftung (PTS) labs, assesses resistance to chemicals, water, tape, folding, rubbing, aging, forgery, light, and transfer of recording.<sup>1</sup> Sample PTS DONot certificates for HP products can be found at <https://www.ptspaper.de/en/>.

## Waterfastness

Original HP Toner Cartridges and toner supplies use toner comprised of plastic which is not water soluble. For this reason, pages printed with Original HP Toner should not streak or run when exposed to water under typical office conditions. The ISO 11798 standard covers some water-resistance properties of toner on plain paper.

## Lightfastness

The ISO 11798 standard also covers lightfastness and accelerated aging, helping ensure that monochrome and color laser prints resist fading from light exposure.<sup>2</sup>

## Paper is key

A document is only as good as the paper on which it is printed. For a very long life, use paper for archival media as specified by the ISO 9706 standard. HP Home & Office Papers are acid free for long-lasting documents according to ISO 9706.<sup>3</sup>



# HP recommends Original HP Toner Cartridges for page durability

Toner composition is key for permanence characteristics. All tests are conducted with Original HP Toner Cartridges. When non-HP cartridges are used in an HP printer, HP cannot guarantee that these test standards and desirable page durability properties are still met.



## Document and storage recommendations

Improve the durability of your document by following these guidelines:

- Print using an HP printer with Original HP Toner Cartridges and paper that meets the ISO standards
- Avoid placing the documents in direct sunlight and long exposure to sunlight
- Avoid extreme environmental conditions (humidity, heat, cold, etc.)
- Display prints (photos, diplomas, etc.) under glass

ORIGINAL HP TONER SUPPLIES ARE RIGOROUSLY TESTED TO WORK WITH YOUR PRINTER AND HP BUSINESS PAPERS. WHEN QUALITY AND RELIABILITY MATTER, ORIGINAL HP SUPPLIES ARE THE RIGHT CHOICE FOR YOUR BUSINESS.

<sup>1</sup> See [ptspaper.de/en/](http://ptspaper.de/en/).

<sup>2</sup> For black toner, see <http://publiccert.extweb.sp.se/en/Product/List/1091>. For color toner, see <http://publiccert.extweb.sp.se/en/Product/List/1093>.

<sup>3</sup> Based on lot testing conducted by Sylvamo Corporation per ISO 9706. See [iso.org/standard/17562.html](http://iso.org/standard/17562.html).

