Overview

HP Toner Permanence and Durability
August 2014

Durability
Original HP Toner cartridges are designed to work with HP LaserJet printers to provide high-quality output. During the fusing process, toner particles (which are plastic polymer with special additives designed for similar size and shape) are melted and adhere to the paper. Several external conditions, however, may adversely affect toner durability, including the printer's condition, environmental conditions such as heat, moisture and pressure, and chemical reactions that involve contact with other materials and the atmosphere.

HP LaserJet printers undergo different types of rigorous tests, and the leading tests are as follow:

- **ISO 11798 Testing:** Many HP LaserJet printers and HP Toner cartridges meet the international permanence and durability Standard ISO 11978. The test methodology of this standard includes lightfastness, water resistance and resistance to wear, heat and folding. HP has commissioned these test to SP, an independent Swedish Laboratory.* HP ISO 11798 certificates can be downloaded from [http://www.hp.com/go/printpermanence](http://www.hp.com/go/printpermanence).

- **PTS Testing:** HP LaserJet printers and HP toner cartridges undergo the German test for notary and civil registry offices (DONot). The primary goal of this test is to have documents that cannot be changed without notice (Dokumentenechtheit). The test covers resistance to chemicals, water, folding, rubbing, tape, aging and forgery, as well as lightfastness and transfer of recording. The test is conducted by the independent PTS (Papiertechnische Stiftung) laboratories.** The PTS DONot certificates for HP printers and its Original HP Toner cartridges can be found here: [http://www8.hp.com/de/de/campaign/printer/laser/doku-echt-monolaserjet.html](http://www8.hp.com/de/de/campaign/printer/laser/doku-echt-monolaserjet.html).

*SP: [http://www.sp.de](http://www.sp.de)  **PTS: [http://www.ptspaper.de](http://www.ptspaper.de)
**Waterfastness**
HP LaserJet print cartridges use toner comprised of plastic which is not soluble in water. For this reason, toner should not streak, run or fade when exposed to water. The use of HP LaserJet print cartridges in the office is effective where documents are exposed to highlighters and/or potential spills.

**Lightfastness**
HP LaserJet printers undergo several ISO standard tests (see the Durability paragraph above) for resistance to wear, folding, and transfer. In addition to durability tests, it also covers light fastness, and accelerated aging. HP internal test results show that Color LaserJet prints resist fading and aging comparable with an average photo kiosk (Walgreens/Wal-Mart) and/or outsourced copier documents (Kinko’s).

**Paper is Key**
A document is only as good as the paper it is printed on. For a very long life, use paper that meets the ISO Standard 9706 or 11108 for permanent and archival paper. HP Business Communication Papers and HP Everyday Papers Multi-Machine are tested and meet ISO 9706 for permanence. These papers are acid and lignin free to ensure documents will last a long time. Learn more at:  

**Original HP Toner cartridges are key**
Please note, toner composition is key for permanence characteristics. All tests are conducted with Original HP toner cartridges. When non-HP cartridges are used in the HP LaserJet, HP cannot guarantee, that these test standards are still met.

**Final Document and Storage Recommendations**
The best way to ensure the durability of your document is to follow these guidelines:

- Print using an HP printer with Original HP toner cartridges and paper that meets the ISO standard
- Avoid placing the documents in direct sun light or avoid long exposure to sun light
- Avoid extreme environmental conditions (humidity, heat, cold, etc.)
- Store in normal home and office conditions
- Best if photos, diplomas, etc. are displayed under glass

For more information please go to: [http://www.hp.com/go/printpermanence](http://www.hp.com/go/printpermanence)

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