HP COLOR LASERJET PRO M454DW



Blue Angel User Information DE-UZ 219

The HP printing system HP Color LaserJet Pro M454dw is awarded with the environmental label Blue Angel (DE-UZ 219, edition January 2021) in Germany, for meeting altogether more than 100 strict certification criteria. Please note that the HP printing system HP Color LaserJet Pro M454dw is also suited for private use by end-consumers. In the following, essential environmental information on the device is summarised. Comprehensive information on the Blue Angel product requirements and detailed product specifications are available at www.blauer-engel.de.



PRINTING PAPER

This device is suitable for using recycled paper in accordance with EN 12281.

DOUBLE SIDED PRINTING IN DELIVERY STATUS

The device is equipped with an automatic duplexer for double-sided printing. Duplex printing is the default setting. Furthermore, the device features the capability to printout several pages of a digital file on one single page.

LONGEVITY

- HP recommends a monthly page volume of up to 4,000 pages for this device.
- All necessary exchange parts are available to the private user and can be replaced by him-/herself.
- Spare parts and exchange parts for the repair of this device model are still available at least five years after end of production.
- HP recommends following the intervals for cleaning and maintenance as described in the product information.

INFORMATION ON POST-CONSUMER RECYCLED PLASTIC

HP contributes to the conservation of resources by using post-consumer recycled plastic for production of new HP products. These plastics are recycled waste plastics stemming from private or commercial end-consumers. This HP device contains 0-1% of post-consumer recycled plastic.

RETURN OF EQUIPMENT

HP offers customers in Germany the opportunity to return used equipment. Information on the return of equipment is available at your local HP sales or customer-service centre or at http://www.hp.com/recycle.

RETURN OF CONSUMABLES

In Germany and many other countries, HP toner cartridges for this device can be returned cost-free to HP as part of the return and recycling programme. The packaging of each new HP toner cartridge contains information on how to participate in this programme. Or visit our website: http://www.hp.com/recycle.

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YIELDS OF CONSUMABLES

Determined according to ISO/IEC standard 19798 the HP toner cartridges shipped with the product have the following yields:

HP LaserJet introductory black toner cartridge: 1,200 pages HP LaserJet introductory cyan toner cartridge: 1,200 pages HP LaserJet introductory magenta toner cartridge: 1,200 pages HP LaserJet introductory yellow toner cartridge: 1,200 pages

The yield of this toner cartridge may be reduced as a consequence of the initial commissioning process or calibration processes of the HP printing system.

Further information can be found at http://www8.hp.com/h71041/learn-about-supplies/us/en/overview.php.

INFORMATION ON HANDLING OF THE TONER MODULES

- Please leave HP toner cartridges in their despatch packaging until you need them for use in your printer; when inserting the HP toner cartridge, please follow the information on handling.
- HP toner cartridges should never be opened by force. If toner dust escapes, e.g. as a result
 of inappropriate handling, inhalation of dust and skin contact are to be avoided as a
 precautionary measure.
- In case of skin contact wash affected areas thoroughly with soap and cold water. HP toner cartridges are to be kept out of the reach of children.

AIR EMISSIONS

With original HP toners, the device passes the air emission test for monochrome and colour printing according to DE-UZ 219. Since plastics of new electrical devices generally release small amounts of volatile substances into the room air, we recommend providing sufficient air exchange in rooms where new devices are set up.

NOISE EMISSIONS

Declared sound power level for one-sided printing (LwAc)

In monochrome print mode 27 pages/minute: In colour print mode 27 pages/minute:

6.32 Bels and 63.2 dB 6.32 Bels and 63.2 dB

ENERGY

Energy information on HP Color LaserJet Pro M454dw

The consumption of electric power depends on its properties and on the way it is used. HP Color LaserJet Pro M454dw is designed and pre-set in a way to allow you to reduce electricity costs.

Directly after the last print job/print or copy job, HP Color LaserJet Pro M454dw with its instant-on fuser technology switches over to an electric power saving mode, from which it can quickly print again. If the device switches over to electric power saving modes, you can save electricity and operating costs. If the device is to print again, there can be a short delay – this is called recovery time. However, the device meets the strict Blue Angel requirements for a recovery time (http://www.blauer-engel.de).

You can save electricity costs by shortening the device's delay times as it will switch over to an electric power saving mode more quickly. If you extend the delay time or deactivate the electric power saving mode, you should consider that consequently the device will consume more electric power and might no longer meet the maximum value for electric power consumption of the Blue Angel. We recommend not extending the delay times.

The device is so designed as to ensure that it can be switched to the Off-mode (standby) by pressing the on/off switch up to twice a day without suffering damage. This device does not have a switch by which it can be completely disconnected from the mains. When after having switched off the device you pull out the power plug, electric power consumption is completely stopped.

The table below lists the individual power consumption values as well as delay and recovery times (factory setting). With these values the device meets the Blue Angel requirements.

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Overview of HP Color LaserJet Pro M454dw operating modes

Page throughput for A4 paper size (according to ISO/IEC 24734):

In monochrome print mode: 27 pages/minute with a resolution of 236 dpcm (600 dpi) 27 pages/minute with a resolution of 236 dpcm (600 dpi)

(dpcm = dots per centimetre [Bildpunkte pro Zentimeter]); (dpi = dots per inch [Bildpunkte pro Zoll])

| Switch symbol | Operation mode ¹ | Power consumption ² watts | Delay time ³ minutes | Recovery time seconds |
|--|--|--------------------------------------|------------------------------------|-----------------------|
| Maximum power consumption (at switch-on): 1150 watts | | | | |
| | Printing (continuous operation at 27 pages/minute), monochrome | 558 | immediately | immediately |
| | Ready | 14.3 | immediately | immediately |
| | Sleep | 0.66 | 1 (160) | 2 |
| (| Off-mode (standby) | 0.1 | switch activated | _ |
| | Disconnection from mains | 0 | e.g. pull out power plug | _ |

After the last print job, the device switches over to electric power saving modes in several steps. By and by, electric power consumption is reduced in these modes. The device will switch over to the Ready mode first. Then the device switches over to Sleep mode after the delay time stated above.

Typical electricity consumption (TEC) of HP Color LaserJet Pro M454dw

Measured with Blue Angel energy settings enabled, as stated in the table above. The typical electricity consumption (TEC) of HP Color LaserJet Pro M454dw is $0.34 \, \text{kWh/week}$.

TEC determined according to standard use cycle (per ENERGY STAR version 3.0), based on typical workplace dynamics (8 hours on each of the 5 workdays of a calendar week; 351 pages printed per workday). Energy testing follows ENERGY STAR 2.0 protocol with the following Blue Angel specifics: A4 format paper and line voltage of 230V. For the standard use cycle according to ENERGY STAR version 3.0 for this device, the following values were used: 27 print jobs per working day, each with 13 pages, single-sided at monochrome printing (351 pages/day).



² Averaged value, measured without accessories.

Delay time is the time that elapses after the end of the printing process until the device enters the respective mode. The figures in brackets indicate the user-selectable range within which delay times can be adjusted.