Original HP toner cartridges for use with the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series* offer a wide variety of safety and environmental features. HP requires that its cartridges comply with HP standards, requirements of mandatory regulations, and voluntary certification. Main requirements are summarised in HP's General Specification for the Environment (GSE). Accordingly, HP strongly recommends that users apply only original HP printing supplies to ensure safe and sustainable operation of their HP printer.

Firm precautions ensure safe products

EU and US classification – HP toner mixtures used with HP Color Laserjet Enterprise (Flow) MFP M681/M682 series devices are not classified as hazardous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)(1) as well as the assessment criteria for mixtures in the European Union (Regulation (EC) No 1272/2008, as amended)(2) and applicable requirements in the United States (OSHA CFR 1910.1200, as amended)(3). Accordingly, they are neither classified nor labelled as toxic, carcinogenic, mutagenic, toxic to reproduction, sensitising or corrosive.

REACH compliance – HP is committed to meeting all applicable REACH requirements and providing customers with information about the chemicals in our products as needed to comply with REACH(4) – including original HP toner cartridges for the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series.

RoHS conformity – Where countries apply materials restrictions on electrical and electronic equipment to toner cartridges (such as the European Union’s RoHS Directive 2011/65/EU), HP is committed to meeting all applicable materials restrictions and documentary requirements by the relevant deadlines.
GSE fulfilment – All toner cartridges for the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series meet a variety of strict substances and materials restrictions according to our General Specification for the Environment (GSE). The GSE is a series of standards which defines HP’s global product environmental requirements, applies HP-wide, and contributes to our commitment to global citizenship.

Strict criteria for sustainable toner cartridge boxes

Heavy metals – Packaging materials for printing supplies of the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series must not contain lead, mercury, cadmium, or hexavalent chromium where the sum concentration of these incidental substances is greater than 0.01% (100 ppm) by weight.\(^5\)

CFCs and HCFCs – Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) listed in the GSE (including in Standard 011-01, 011-01A, and 011-01B) must not be used in or for the manufacturing of plastic foam packaging materials (for example as a foam blowing agent).\(^6\)

PVC, bleaching agents and phthalates – PVC must not be used in packaging\(^7\) and elemental chlorine shall not be used as a bleaching agent to bleach virgin or recovered content fibre used in paper-based packaging.\(^8\) The phthalates DEHP, BBP, DBP, and DIBP must not be used in packaging in concentrations greater than 0.1% (< 1,000 ppm) by weight in any homogeneous material.\(^9\)

Materials savings – Packaging of toner cartridges for the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series is part of an HP initiative to use up to 30% post consumer recycled content and replace polystyrene by 100% post consumer recycled content in toner cartridge end-caps.

Return and recycling instead of landfill disposal

Designed for recycling – HP toner cartridges are designed with a view to easy disassembly and a reduction of the number of parts used. Parts of original HP toner cartridges for HP Color LaserJet Enterprise (Flow) MFP M681/M682 series devices greater than 25 grams in weight are marked with internationally recognised ISO symbols for ease of materials identification.

Toner cartridge return options – HP helps you recycle your original HP Color LaserJet Enterprise (Flow) MFP M681/M682 series toner cartridges – it’s easy and free with the HP Planet Partners programme available in more than 60 countries and territories around the world.\(^10\)

Closed-loop recycling process – Original HP toner cartridges returned through HP Planet Partners go through a multiphase recycling process and is reduced to raw materials which can then be used to make new products, such as original HP toner cartridges. You can be confident that original HP toner cartridges recycled through HP Planet Partners are never refilled, resold, or sent to a landfill.\(^10\) Meanwhile, 100% of HP toner cartridges contain 10-33% recycled content.\(^11\)

External proof of sound performance

For meeting more than a hundred criteria, HP Color LaserJet Enterprise (Flow) MFP M681/M682 series devices are certified with the internationally renowned Blue Angel eco label according to RAL-UZ 205 in Germany.\(^12\) This includes toner cartridges and toners which were part of Blue Angel testing. Accordingly, these toners do not contain substances as intentionally added constituents which are classified as carcinogenic, mutagenic to germ cells, or toxic to reproduction. Also, they do not contain azo dyes that can release carcinogenic aromatic amines according to REACH Regulation\(^13\), while organotin compounds, cobalt and nickel oxides content is as low as reasonably achievable. Photoconductor drums do not contain intentionally added selenium, lead, mercury or cadmium or any of their compounds as constituents.\(^14\)
The HP Color LaserJet Enterprise MFP M681dh, the HP Color LaserJet Enterprise MFP M681f, the HP Color LaserJet Enterprise Flow MFP M681z, and the HP Color LaserJet Enterprise Flow MFP M682z are certified with the Blue Angel eco label according to RAL-UZ 205 in Germany.

Please note that alternative eco labels for refilled and remanufactured toner cartridges do not require the same safety and environmental performance as the Blue Angel awarded for HP printing systems. In fact, they offer less and often significantly weaker criteria compared to those for HP printing systems and their toner cartridges.

**Stringent requirements for suppliers and manufacturing**

HP toners for the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series are manufactured following precisely defined formulations using only raw materials from carefully chosen and contracted suppliers in order to achieve high product quality. Manufacturing is conducted in production sites that are ISO certified (ISO 14001, environmental management system) and that include worldwide accepted ISO requirements in the quality management system (ISO 9001:2000, quality assurance in production) or an equivalent programme.

Respective suppliers are committed to comply with our high safety and environmental GSE standards (see above). HP's active verification process to prevent the use of non-compliant material in the products is based on our risk analysis of restricted substances entering the supply chain and includes technical documentation outlined in the European Union's EN 50581:2012 standard.

**Check for potential substance and particle release**

When original HP printing supplies are used as intended to operate HP Color LaserJet Enterprise (Flow) MFP M681/M682 series devices, test results meet or exceed relevant occupational and indoor air requirements. In addition, for HP Color LaserJet Enterprise (Flow) MFP M681/M682 series printing systems, HP can confirm compliance with the strict criteria for substance and particle release of the Blue Angel eco label\(^{(15)}\)\(^{(16)}\). In detail, this includes potential release of TVOCs, benzene, styrene, unidentified VOCs, ozone and particles.

**Further details if you want to know more**

In-depth information on your particular toner cartridges for HP Color LaserJet Enterprise (Flow) MFP M681/M682 series devices is listed in the following Safety Data Sheets (SDS)** which are available on the HP website:

- SDS for HP toner cartridge **HP 655A black** – no. CF450A
- SDS for HP toner cartridge **HP 655A cyan** – no. CF451A
- SDS for HP toner cartridge **HP 655A yellow** – no. CF452A
- SDS for HP toner cartridge **HP 655A magenta** – no. CF453A
- SDS for HP toner cartridge **HP 657X black** – no. CF470X-XC
- SDS for HP toner cartridge **HP 657X cyan** – no. CF471X-XC
- SDS for HP toner cartridge **HP 657X yellow** – no. CF472X-XC
- SDS for HP toner cartridge **HP 657X magenta** – no. CF473X-XC

For HP Color LaserJet Enterprise (Flow) MFP M681/M682 series devices certified with the Blue Angel eco label in Germany, Blue Angel user information documents also provide further details on the particular devices' environmental performance when operated with original HP printing supplies. The documents can be accessed on the Blue Angel User Information documents subpage on the HP website, the Blue Angel website or by clicking the following links:
Blue Angel user information for HP Color LaserJet Enterprise MFP M681dh
Blue Angel user information for HP Color LaserJet Enterprise MFP M681f
Blue Angel user information for HP Color LaserJet Enterprise Flow MFP M681z
Blue Angel user information for HP Color LaserJet Enterprise Flow MFP M682z

More information on the Blue Angel and certified HP products is available on the Blue Angel section of the HP website.

Don't compromise on safety and the environment

If users want to be sure to get the safety and environmental performance outlined above, HP recommends operating the HP Color LaserJet Enterprise (Flow) MFP M681/M682 series with original HP toner cartridges only.

Alternative non-HP products might significantly alter the behaviour of your HP printer.
To ensure users can consider all safety and environmental related aspects at any time, HP makes information on relevant testing of HP original toner cartridges readily available.

* This series includes the following models: HP Color LaserJet Enterprise MFP M681dh, HP Color LaserJet Enterprise MFP M681f, HP Color LaserJet Enterprise Flow MFP M681z, HP Color LaserJet Enterprise Flow MFP M682z. Please note that there are HP printing systems which are available in certain regions only.

** The compilation of the listed SDSs is not exhaustive and selected based on the following settings from the HP website: Germany/English (country/language).

Supporting references: