Ink Environmental Fact Sheet

Information on safety and sustainability of original HP printing supplies

Original HP ink cartridges for use with the **HP Officejet Pro X451/X551 printer 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 only apply original HP printing supplies to ensure safe and sustainable operation of their HP printer.

**Firm precautions ensure safe products**

**EU and US classification** – HP ink mixtures for HP Officejet and PageWide printing systems are not classified as hazardous according to the assessment criteria for mixtures in the European Union (Regulation (EC) No 1272/2008, as amended)\(^1\). They are neither classified nor labelled as toxic, carcinogenic, mutagenic, toxic to reproduction, sensitising or corrosive. Accordingly, users can be sure that no health risks are to be expected from HP ink mixtures for HP Officejet and PageWide printing systems when used as intended. Most of these HP ink mixtures are also not classified or labelled as hazardous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)\(^2\) as well as applicable requirements in the United States (OSHA CFR 1910.1200, as amended)\(^3\). If required, HP ink cartridges might bear supplemental label information for containing particular sensitising agents in accordance with the European Union (Regulation (EC) No 1272/2008, as amended)\(^1\). Further safety information might be provided in the inserts of the products or on the packaging.

**REACH compliance** – HP is committed to meeting all applicable REACH requirements and providing customers with information about the chemicals in our products where required by REACH\(^4\) – including original HP ink cartridges for the HP Officejet Pro X451/X551 printer series.
**RoHS conformity** – Where countries apply materials restrictions on electrical and electronic equipment to ink 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 fulfillment** – All ink cartridges for the HP Officejet Pro X451/X551 printer 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 ink cartridge boxes

**Heavy metals** – Packaging materials for printing supplies of the HP Officejet Pro X451/X551 printer series must not contain lead, mercury, cadmium, or hexavalent chromium where the sum concentration of these 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 ink cartridges for the HP Officejet Pro X451/X551 printer series is designed to be fully recyclable in areas where cardboard, newspaper and plastics collection and recycling programs are available.

### Return and recycling instead of landfill disposal

**Design for recycling** – All parts of original HP ink cartridges for HP Officejet Pro X451/X551 printer series devices greater than 25 grams in weight are marked with internationally recognised ISO symbols for ease of materials identification.

**Ink cartridge return options** – HP helps you recycle your original HP ink cartridges—it’s easy and free with the HP Planet partners programme available in more than 50 countries and territories around the world.\(^{(10)}\)

**Closed-loop recycling process** – Every original HP ink cartridge returned through HP Planet Partners goes through a multiphase recycling process and is reduced to raw materials which can then be used to make new products, such as original HP ink cartridges. You can be confident that cartridges recycled through HP Planet Partners are never refilled, resold, or sent to a landfill.\(^{(10)}\) Around 75% of our original HP ink cartridges contain an average of 20% recycled plastic.\(^{(11)}\)

### External proof of sound performance

For meeting more than a hundred criteria, HP Officejet Pro X451/X551 printer series devices, including their ink mixtures and ink cartridges, are certified with an internationally leading eco label, the German Blue Angel.\(^{(12)}\) Accordingly, ink mixtures do not contain substances as intentionally added constituents which are classified as carcinogenic, mutagenic, toxic to reproduction, persistent, bio-accumulative or toxic. Also, they do not contain intentionally added azo dyes, while cobalt and nickel oxides content is as low as reasonably achievable.\(^{(13)}\) Biocides are generally checked for strict compliance: active biocides are either so-called existing substances according to EU regulations\(^{(14)}\) or are approved according to the German Biocidal Products Act (Biozidgesetz).\(^{(15)}\)
The HP Officejet Pro X451dn printer, the HP Officejet Pro X451dw printer, and the HP Officejet Pro X551dw printer are certified with the Blue Angel eco label according to RAL-UZ 171. (12)

Please note that there is no Blue Angel certification for refilled and remanufactured ink cartridges. Therefore, if users want to make sure that their Officejet printing system meets the widely recognised criteria of the Blue Angel, there is no alternative to original HP ink cartridges.

**Stringent requirements for suppliers and manufacturing**

HP inks for the HP Officejet Pro X451/X551 printer 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 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 Officejet Pro X451/X551 printer series devices, test results meet or exceed relevant occupational and indoor air requirements. In addition, for HP Officejet Pro X451/X551 printer series printing systems, HP can confirm compliance with the strict criteria for substance release of the Blue Angel eco label (15) (16). In detail, this includes potential release of TVOCs, benzene, styrene and unidentified VOCs.

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

In-depth information on your particular ink cartridges for HP Officejet Pro X451/X551 printer series devices is listed in the following Safety Data Sheets (SDS) which are available on the HP website:

- SDS for HP ink cartridge **HP 970 SETUP black** – no. F6U75SERIES
- SDS for HP ink cartridge **HP 970 Setup and HP 970 black** – no. CN621SERIES
- SDS for HP ink cartridge **HP 971 Setup and HP 971 cyan** – no. CN622SERIES
- SDS for HP ink cartridge **HP 971 Setup and HP 971 yellow** – no. CN624SERIES
- SDS for HP ink cartridge **HP 971 Setup and HP 971 magenta** – no. CN623SERIES
- SDS for HP ink cartridge **HP 970XL black** – no. CN625SERIES
- SDS for HP ink cartridge **HP 971XL cyan** – no. CN626SERIES
- SDS for HP ink cartridge **HP 971XL yellow** – no. CN628SERIES
- SDS for HP ink cartridge **HP 971XL magenta** – no. CN627SERIES
For HP Officejet Pro X451/X551 printer series devices certified with the Blue Angel eco label, 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 website or by clicking the following links:

- Blue Angel user information for HP Officejet Pro X451dn printer
- Blue Angel user information for HP Officejet Pro X451dw printer
- Blue Angel user information for HP Officejet Pro X551dw printer

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 Officejet Pro X451/X551 printer series with original HP ink 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 cartridges readily available.

* This series includes the following models: HP Officejet Pro X451dn printer, HP Officejet Pro X451dw printer, HP Officejet Pro X551dw printer. Please note that there are HP printing systems which are available in certain regions only.

Supporting references: