

Last generation of HP Latex Ink¹



Lead with the most environmentally certified technology²

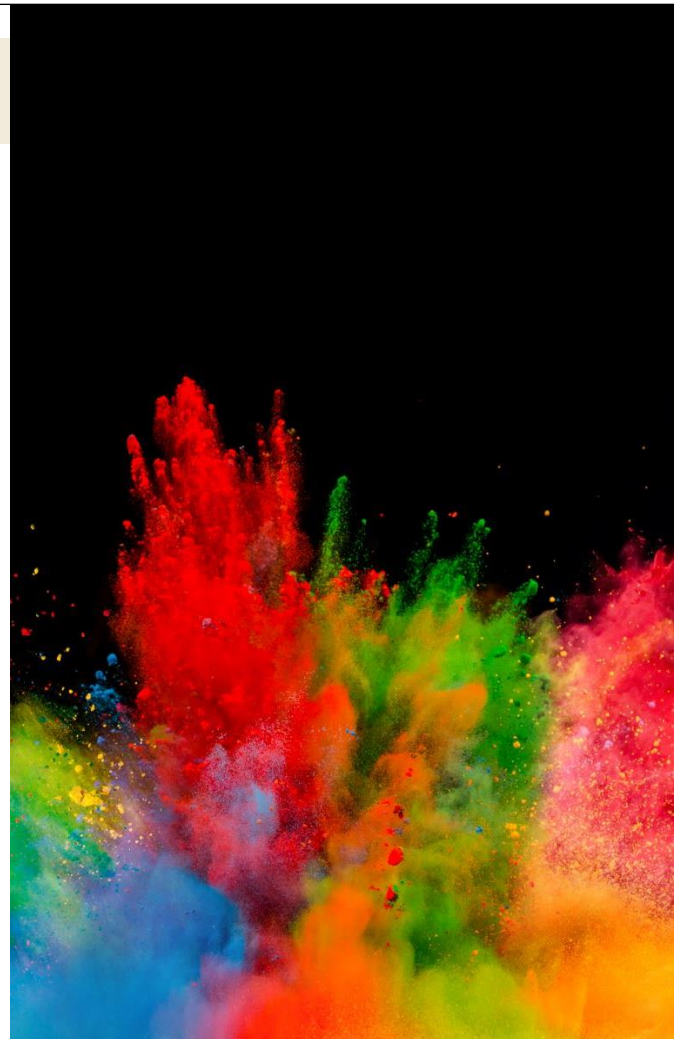
The last generation of HP Latex Ink¹ brings more innovation than previous generations. The result is that our HP Latex products help go beyond on the sustainability journey with environmental certifications that show we mean business, features that contribute to the wellbeing of the employees, customers, and businesses.

Introduction

At HP Large Format, our ink cartridges not only comply to the mandatory CE Mark, EU RoHS, EU REACH and other applicable world-wide chemical notification requirement³, but also go beyond these standards.

Employing an end-to-end approach, HP continues to drive a greater sustainable impact in large-format printing with each new generation of HP Latex Printing System. The result is we lead with the most environmentally certified technology, meeting Greenguard Gold⁴, UL ECOLOGO certification⁵, and many other environmental achievements, detailed in the certification explained document. For further details on these certifications, please refer to our comprehensive document available on the [Large Format Knowledge Center](#).

HP Latex ink technology contribute to the wellbeing of your employees, customers and businesses and provides outdoor durability and versatility across all common media types used in sign and display applications, while newly expanding into white ink applications, to produce high-quality odorless prints⁶.



Protect – Provide a comfortable working environment.

HP Latex is a water-based ink technology, meaning it consists of average 65% of the ink formula is water⁷.

The chemical composition of the ink you choose has a significant impact on the working conditions for your operators and the overall environmental aspects. The latest HP Latex Inks have been designed to avoid the hazards associated with other ink types while maintaining high quality prints and providing a more comfortable working environment for your operators. HP Latex Inks also allow print service providers to produce odorless prints⁶ for indoor display in sensitive environments such as hospitals and schools.

HP latex inks are made in a factory that uses reclaimed water. In this way HP contributes to water resiliency and protecting natural resources. The water HP uses has gone through multiple purification steps providing a purity that is comparable or higher than conventional tap water as confirmed by regular monitoring and thus ensuring that we provide inks to our customers with the outstanding performance they have come to expect.

The last generation of HP Latex Inks contain no Hazardous Air Pollutants (HAPs)⁸. Printing with HP Latex inks avoid the problematic reactive monomer chemistry and ozone generation associated with UV printing. This ink formula is combined with wetting agents and humectants needed for printhead reliability (which, incidentally, your HP home printer also uses) to produce a liquid ink vehicle that carries the latex polymer and pigment particles to and through the printer's printheads onto the substrate. Radiant heat and forced airflow evaporate the liquid and set the latex, binding the pigments and substrate together to leave a durable image on the print media surface. Prints are ready to use, even animate, immediately.

Containing up to 65% water, this ink has a flashpoint greater than 110 °C, making them non-combustible and non-flammable¹⁰. In contrast, eco-solvent and solvent-based inks typically have highly volatile components in high concentrations with flashpoints around 60°C to 70 °C, and may require in some countries, special transportation, handling, and storage.

As with most cyan inks, the HP Latex cyan ink utilizes a copper-based dye that is present in a bound form as copper phthalocyanine. There are no other heavy metals present as intentionally added ingredients in these HP Latex inks and the inks are PVC-free¹².

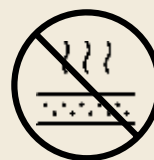
Finally, HP Latex Ink is not classified as an eye irritant, and the latex polymer in HP Latex inks is not related to natural or synthetic latex, so it does not cause a latex-related allergic reaction.



Water-based Ink



No HAPs



Odorless Prints

Advance – Lower your plastics impact.

At HP, we make sure to reduce our plastics impact. HP printers and supplies contain UL validated ocean bound plastic and recycled plastics¹³. Our global commitments include using 25% recycled plastic across all HP divisions by 2025 and cutting down single-use plastics by 75% in the same timeframe¹⁴.

Our HP Latex printer series utilize the carton-based ink cartridge. The ink cartridge outer cardboard is 100% recycled and recyclable through local cardboard/paper programs¹⁵. The inner materials, the ink bag assembly, and printheads can be returned to the HP Planet Partners program¹⁶. Take part in HP's free and easy recycling program to help cartridges become new products and help keep plastics out of landfills. HP Planet Partners Program¹⁶ is offered free of charge more than 60 countries and territories around the world. More than ONE BILLION print cartridges have been returned to HP Planet Partners recycling program as of December 31, 2022.¹⁷

Stand out – Through environmental certifications.

Third-party certifications are a good way to show impartiality and transparency. HP Latex technology delivers certifications that matter through different the aspects of its operations - from the technology of our ink to hardware, to the final prints.

The HP Latex ink is UL ECOLOGO Certified⁵ which demonstrates that the ink meets a range of stringent environmental performance standards and human health criteria. HP was the first printing company to have UL ECOLOGO certified inks⁵.



They also demonstrate rigorous and comprehensive standards for low chemical emissions in indoor air for the finished print, such as UL GREENGUARD GOLD⁴.

HP Latex Inks are UL GREENGUARD GOLD certified⁴ at the lowest emissions, qualified for unrestricted use to wallpaper a full room. Also, no wait time is necessary before installation (or prior to applications with lamination).



In addition, these prints are certified AgBB¹⁸ and rated A+ (very low emission) according to the Émissions dans l'air intérieur statement on the level of volatile substances in indoor air.⁹





Summary

Water-based HP Latex Inks are designed thinking on sustainable impact throughout the product lifecycle. HP Latex Inks meet a variety of stringent human health criteria represented by UL ECOLOGO⁵ and UL GREENGUARD GOLD⁴.

Finally, the HP Large Format Sustainability Training for HP Latex Printing Technology²⁰ for HP Latex users provides convenient web-based training to help print service providers gain knowledge and provide value to the growing number of clients looking for graphics solutions with reduced environmental impact.

Learn more at

hp.com/go/environment and hp.com/go/SCC

References

¹Applicable to all Latex generation 4: HP 832, HP 872, HP 873, HP 882, HP 883 and HP 886 Latex Inks.

²Applicable to HP Latex technology compared to competitive large-format printing alternatives using solvent and UV technologies. Not all certifications are applicable for all generations of HP Latex Inks. See individual product data sheets for more information at hp.com/go/latex. Verified as of the publishing date in February 2024.

³The following countries have chemical inventory requirements, and the HP 883 inks can be imported without restriction: Australia (AICS), Canada (NDSL and DSL), China (IECSC), Province of Ontario, Japan (ENCS), Korea (KECI, K-REACH), New Zealand (NZIoC), Switzerland (ChemO), Taiwan (ECSI, Taiwan REACH), United States (TSCA).

⁴Applicable to HP Latex Inks. UL GREENGUARD Gold Certification to UL 2818 demonstrates that products are certified to UL's GREENGUARD standards for low chemical emissions into indoor air during product usage. Unrestricted room size—full decorated room; 33.4 m² (360 ft²) in an office environment; 94.6 m² (1,018 ft²) in a classroom environment. For more information, visit www.ul.com/gg or www.greenguard.org. For certifications, see www.greenguard.org.

⁵UL ECOLOGO® Certification to UL 2801 demonstrates that an ink meets a range of stringent criteria related to human health and environmental considerations (see ul.com/EL).

⁶Based on sensory evaluations conducted by Odournet done according to VDI Guideline 3882 where 883 inks were characterized as “weak” in odor intensity and “neutral” for hedonic tone.

⁷Water in Gen4 Inks range between 60% and 80%, therefore 65% is taking all the inks installed in a Latex printer. The exact range of water for each single color is published into the SDS available here: [Safety Data Sheets \(hp.com\)](http://Safety Data Sheets (hp.com)).

⁸HP Latex Inks were tested for Hazardous Air Pollutants, as defined in the Clean Air Act, per U.S. Environmental Protection Agency Method 311 (testing conducted in 2013) and none were detected.

⁹Acrylate monomers present in uncured UV inks and UV-gel inks can damage skin.

¹⁰Water-based HP Latex Inks are not classified as flammable or combustible liquids under the USDOT or international transportation regulations. Testing per the Pensky-Martens Closed Cup method demonstrated flash point greater than 110° C (230° F).

¹¹Arsenic, antimony, soluble barium, cadmium, chromium, cobalt, mercury, lead, nickel, and selenium are not present as intentionally added components and were not detected in toy testing. However, according to ICP-MS results, the following may be present in the raw ink as contaminants: Arsenic <0.1 ppm, Chromium <0.2 ppm, Nickel <0.2 ppm

¹²As stated in EARS, HP Latex Gen4 do not intentionally add Vinyl chloride monomer (VCM). For more information, please visit “HP Sustainability and Compliance Center.”

¹³Applicable to select HP printers. Contains at least this percentage of recycled plastic. Percentage of recycled plastic is calculated by plastic total weight. The HP Latex 700/800 printer total plastic weight uses 10 kg (22 lbs) or 20% recycled plastics recovered from post-consumer electronics, closed loop from HP Planet Partners, soda bottles, and UL Validated ocean bound resins. HP received the first recycled content validation for ocean bound plastics from UL under the UL 2809 Environmental Claim Validation Procedure, see ul.com/news/hp-receives-first-recycled-contentvalidation-ocean-bound-plastics-ul.

¹⁴See our Circularity goals in the HP Sustainable Impact Report

¹⁵Applicable to selected printer. 100% outer box packaging made from recycled fibers. Certified by AMB Packaging Pte. Ltd.

¹⁶Program availability varies. For details, see hp.com/hprecycle.

¹⁷See our Circularity goals in the HP Sustainable Impact Report

¹⁸HP Latex Inks meet with AgBB criteria. AgBB is a health-related evaluation of building products in Germany. Prints produced with HP Latex Inks on HP PVC-free Durable Suede Wall Paper meet AgBB criteria for health-related evaluation of VOC emissions of indoor building products. See umweltbundesamt.de/sites/default/files/medien/355/dokumente/agbb_evaluation_scheme_2018.pdf

¹⁹Émissions dans l'air intérieur provides a statement on the level of emission of volatile substances in indoor air posing health risks if inhaled—on a scale from A+ (very low-emission) to C (high-emission). Wall decorations printed with HP Latex Inks and HP PVC-free Wallpaper are rated A+ according to Émissions dans l'air intérieur. See anses.fr/en/content/labelling-building-and-decoration-products-respect-voc-emissions

²⁰Visit HP Large Format Knowledge Center for more information.