



HP 821, 831, 871, 881, and HP 3M 891 Latex Inks

Summary of Regulatory Compliance and Environmental Attributes

Introduction

HP 821, 831, 871, 881, and HP 3M 891 Latex Inks used in HP Latex HP 300, 500, 1500, and 3000 series printers (sometimes referred to as third-generation HP Latex) are aqueous-based ink formulations designed by HP for the large format printing industry to meet worldwide regulatory requirements and to address a broad range of sustainability considerations throughout the entire life cycle of a print.

Regulatory Summary

Chemical Inventory Status

The following countries have chemical inventory requirements under which HP Latex Inks can be imported without restriction:

- Australia (AICS)
- Canada (DSL/NDSL)
- Providence of Ontario
- China (IECSC)
- Japan (ISHL)
- Korea (KECI, K-REACH)
- New Zealand (NZIoC)
- Philippines (PICCS)
- Switzerland (ChemO)
- Taiwan (ECSI, Taiwan REACH)
- United States (TSCA)

For EU REACH, HP has completed all necessary registrations to import HP Latex Inks.

Regulated Materials

HP Latex Inks **DO NOT** contain the following regulated materials:

- Arsenic, antimony, soluble barium, cadmium, chromium, cobalt, mercury, lead, nickel, and selenium as intentionally added ingredients
- Restricted azo colorants¹
- Substances regulated as drugs and drug precursors or those requiring special permits for use
- Substances currently regulated under Annex XIV of EU REACH (authorisations) or substances currently restricted under Annex XVII of EU REACH (restrictions)

¹ EU Directive 2002/61/EC, additionally referenced as Regulation (EC) No 1907/2006: REACH, Annex XVI (article 67), restricts the use of azo colorants that break down to aromatic amines known to cause cancer.



Health and Environmental Performance

Emissions

No special ventilation equipment is required with HP Latex Inks.² Additionally, HP Latex Inks do not contain Hazardous Air Pollutants (HAPs)³. HP Latex Inks allow customers to produce odorless prints.

Volatile Organic Compounds (VOC) content for these HP Latex Inks is <300 gram/liter (by EPA Method 24). Cleaning and maintenance processes and instructions are designed for minimal VOC emissions and comply with regulations in the United States.

Human and Ecological Health

HP Latex Inks do not contain intentionally added components in the following categories:

- Carcinogens and mutagens
- California Proposition 65 listed chemicals at concentrations requiring labeling
- Intentionally added substances identified as endocrine disruptors
- Substances considered very toxic or toxic
- Substances classified as respiratory sensitizers
- Substances identified as "very high concern" (SVHC) according to EU REACH criteria
- Substances identified as "very persistent and/or very bioaccumulative" (VPVB) according to EU REACH criteria

Transportation and Waste

HP Latex Inks are non-flammable, non-combustible⁴, and do not require special handling, storage, or transportation-related conditions. These formulations are not classified as Dangerous Goods in accordance with international modes of transport (IATA, IMDG, U.S. DOT, and/or ADR) and do not contain listed marine pollutants.

HP Latex Inks do not contain the following substances and/or characteristics associated with hazardous waste⁵:

- Regulated Metals⁶ (as listed on page 1)
- Regulated Organics⁷

² Special ventilation equipment (air filtration) is not required to meet U.S. OSHA requirements. Special ventilation equipment installation is at the discretion of the customer. See the Site Preparation Guide for details. Customers should consult state and local requirements and regulations.

³ HP 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.

⁴ Aqueous-based HP Latex Inks are not classified as flammable or combustible liquids under the USDOT or international transportation regulations. Testing per the Pensky-Martins Closed Cup method demonstrated flash point greater than 110° C.

⁵ Visit hp.com/recycle to see how to participate and for HP Planet Partners Program availability; program may not be available in your area. For countries where this program is not available, and for other consumables not included in the program, consult your local waste authorities on appropriate disposal.

⁶ Copper is only present in the cyan ink and is present in a bound form as copper phthalocyanine.

⁷ Includes regulated substances present on California STLC and TTLC lists.



Specialty Applications

Schools, hospitals and living areas

HP Latex Inks have been assessed for applications in schools, hospitals and other living areas and meet the emissions certification requirements of UL GREENGUARD GOLD. The UL certification is available at spot.ul.com/main-app/products/catalog/

Certifications

HP Latex Inks have qualified for certifications that demonstrate they meet some of the most rigorous and comprehensive indoor air quality standards for low chemical emissions.



In addition, HP Latex Inks meet the emission criteria for UL GREENGUARD GOLD and the French government's *émission dans l'air intérieur* emissions analysis.

HP Latex inks meet the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) versions 2.0, a list of chemical substances banned from intentional use during production of textiles.⁸

Recyclability

HP 821 and 831 Latex Ink Cartridges contain up to 34% and 39%, respectively. After use, HP 821 and 831 Latex Ink Cartridges and HP 831 and 881 Latex Printheads are eligible for recycling through the HP Planet Partners Program in some countries.⁹ With the HP 871, 881, and HP 3M 891 Latex Ink supplies, up to 70% of the weight of the used ink cartridge is a cardboard container that can be recycled through local municipalities.

HP's recycling program, HP Planet Partners Program, allows easy recycling of HP cartridges and printheads for free. Since the program began in 1991, customers have returned more than 500 million HP ink and LaserJet cartridges for recycling worldwide. HP's multi-phase "closed loop" recycling process uses cartridges returned through HP Planet Partners Program as raw material to produce new Original HP ink and LaserJet cartridges. For more information visit the HP Supplies Recycling page: hp.com/recycle

HP Design for Environment (DfE) Program

In 1992, HP adopted a pioneering company-wide Design for the Environment program that considers environmental impact in the design of every product and solution, from the smallest ink cartridge to large scale industrial presses.

For more information about HP's sustainability and product solutions: hp.com/go/sustainableimpact

⁸ ZDHC is an organization dedicated to eliminating hazardous chemicals and implementing sustainable chemicals in the leather, textile, and synthetics sectors. The Roadmap to Zero Programme is a multi-stakeholder organisation which includes brands, value chain affiliates, and associates, that work collaboratively to implement responsible chemical management practices. See roadmaptozero.com.

⁹ Visit hp.com/recycle to see how to participate and for HP Planet Partners program availability; program may not be available in your jurisdiction. Where this program is not available, and for other consumables not included in the program, consult your local waste authorities on appropriate disposal.

