



HP A50 Inks and A50 Bonding Agent

HP A50 Inks and A50 Bonding Agent are water-based formulations designed by HP to meet worldwide regulatory requirements and to address a broad range of health and environmental considerations throughout the entire life cycle of a print from production to disposal.

Regulatory Summary

Global Chemical Inventories

Customers are responsible for ensuring that they comply with any legal requirements relating to their export, import, or distribution of HP A50 Inks and A50 Bonding Agent. HP has completed all necessary notifications and registrations to enable import and sale of HP A50 Inks and A50 Bonding Agent in countries and regions with chemical inventories relevant to HP's supply chain. Please contact HP's Sustainability and Compliance Center for guidance on specific importation and distribution-related inquiries for countries/regions with tiered registration schemes or where customers may be required to take other actions to comply with chemical regulatory requirements related to export, import or distribution of HP A50 Inks and A50 Bonding Agent.¹

Chemicals of Concern

HP A50 Inks and A50 Bonding Agent DO NOT contain the following regulated materials as intentional added substances or known contaminants above de minimis levels²:

- Arsenic, antimony, soluble barium, cadmium, chromium, cobalt, mercury, lead, nickel, copper (with the exception that copper is present in the cyan ink in a bound form known as copper phthalocyanine), and selenium
- Restricted azo colorants³
- Halogenated organics with the exception of colorants and biocides
- Per- and polyfluoroalkyl substances (PFAS), including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS)
- Polychlorinated terphenyls (PCTs)
- Brominated flame retardants
- Phthalates, including ortho-phthalates
- Bisphenol A (BPA)
- Asbestos
- Mineral oils in the form of Mineral oil aromatic hydrocarbons (MOAH) comprising 1 to 7 aromatic rings and/or Mineral oil saturated hydrocarbons (MOSH) with 16 to 35 carbon atoms⁴

¹ A new support ticket can be submitted to the Sustainability and Compliance Center at <http://sustainability.ext.hp.com/en/support/home>

² HP assesses known contaminants (non-intentionally added substances, NIAS) against the most conservative de minimis level published by authoritative sources such as: EU REACH, EFSA, German BfR, US EPA, CA Proposition 65, and Korea Biocidal Products Regulation (KBPR).

³ Regulation (EC) No 1907/2006 (REACH) Annex XVII (article 67) restricts the use of azo colorants that break down to aromatic amines known to cause cancer.

⁴ As defined in France via Article 112 of law no. 202-105, Decree No. 2020-1725 of 29 December 2020 inserted Articles D543-45-1 and D543-213, and Order of 13 April 2022

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Chemical Regulations

HP A50 Inks and A50 Bonding Agent do not contain intentionally added components or known contaminants above de minimis levels⁵ in the following categories:

- Substances regulated under Annex XIV of EU REACH (authorizations) or restricted under Annex XVII of EU REACH (restrictions)
- Substances identified as "very high concern" (SVHC) by the "candidate list" established under Article 59(1) of EU REACH and last published June 2023⁶
- Substances meeting the criteria as persistent, bioaccumulative and toxic (PBT) or "very persistent and/or very bioaccumulative" (VPVB), as defined by Annex XIII to the EU REACH Regulation
- Substances regulated as persistent organic pollutants and listed in Annex I of (EU) 2019/1021
- Substances requiring risk evaluations under Section 6 of US TSCA
- With the exception that carbon black and copper are present in a bound form, prohibited substances or designated substances above the *de minimis* mixture concentration specified in the Pollutant Release and Transfer Register, Industrial Safety and Health Act, Chemical Substances Control Law, Poisonous and Deleterious Substances Control Law, Labor Safety and Health Law on substances prohibited to be manufactured, and Ozone Layer Protection Laws of Japan
- Substances included on the 'Negative List' established by Japan Printing Ink Makers Association (July 1, 2020)
- California Proposition 65 listed chemicals present in concentrations exceeding labeling thresholds
- Substances considered as chemicals of high concern to children⁷
- Carcinogens, mutagens, or reproductive toxicants (CMRs) specifically listed in the EuPIA Exclusion Policy for Printing Inks and Related Products, Groups A-G, 4th edition, March. 2021
- Intentionally added substances identified as endocrine disruptors
- Substances considered very toxic or toxic
- Substances classified as respiratory sensitizers
- Substances regulated as drugs and drug precursors or controlled substances requiring special permits for use

Human Health and Environmental Attributes

Emissions

HP A50 Inks and A50 Bonding Agent do not contain Hazardous Air Pollutants (HAPs)⁸ or Photo Chemically Reactive Solvents.⁹ HP A50 Inks and A50 Bonding Agent allow HP customers to produce odorless prints as evidenced by results from organoleptic testing conducted in accordance with method EN-1230-1,2 (Robinson method) using SLMB Chap. 47A and Chap. 63B, and DIN EN 4120. Volatile Organic Compounds (VOC) content for HP A50 Inks and A50 Bonding Agent is 11-56 grams/liter according to EPA Method 24. In addition, Volatile Organic Compounds (VOC) content is < 2 grams/liter and 0 grams/liter for the HP A50 Inks and A50 Bonding Agent, respectively, as calculated using the VOC definition set forth under EU 2010/75. This information is referenced in section 9 of the HP Safety Data Sheet. An emissions test summary, providing data generated in accordance with EPA Method 25A, is available upon request. Cleaning and maintenance procedures are designed for minimal VOC emissions and comply with regulations in the United States.

Indoor air quality can be affected by operational conditions. HP's installation guides provide detailed information to assist customers with their unique operations to ensure a comfortable workplace.

⁵ HP assesses known contaminants (non-intentionally added substances, NIAS) against the most conservative de minimis level published by authoritative sources such as: EU REACH, EFSA, German BfR, US EPA, CA Proposition 65, and Korea Biocidal Products Regulation (KBPR).

⁶ The EU REACH candidate list can be accessed at <https://echa.europa.eu/candidate-list-table>

⁷ As specified in the reporting list of chemicals of high concern to children (CHCC list), Washington Administrative Code (WAC) 173-334-130

⁸ HP A50 Inks and A50 Bonding Agent were tested for Hazardous Air Pollutants, as defined in the Clean Air Act, per U.S. Environmental Protection Agency Method 311 and were found to be non-detectable.

⁹ As defined by California South Coast Air Quality Management District Regulation 1

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Transportation and Waste

HP A50 Inks and A50 Bonding Agent are non-flammable, non-combustible¹⁰, and do not require special handling 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.

In addition, HP A50 Inks and A50 Bonding Agent do not contain the following substances above de minimis levels¹¹ and/or exhibiting characteristics associated with hazardous waste:

- Regulated Metals as intentionally added ingredients: Arsenic, antimony, soluble barium, cadmium, chromium, cobalt, mercury, lead, nickel, selenium, and copper (with the exception that copper is present in the cyan in a bound form known as copper phthalocyanine)
- Regulated Organics¹²
- Halogenated Organic Compounds
- Human health and/or ecological toxicity characteristics, as defined by the EU Classification, Labelling, and Packaging (CLP) Regulation 1272/2008/EC

Certifications



UL ECOLOGO® Certified HP A50 Inks and Bonding Agent meet a range of stringent human health criteria.¹³

Recyclability

HP A50 Inks and A50 Bonding Agent have been shown to have “Good Deinkability” across a wide range of papers per Ingede Method 11 and ERPC (European Recovered Paper Council) Scorecard.

HP’s recycling program, HP Planet Partners, allows for recycling of all A50 Inks and A50 Bonding Agent printheads.^{14,15} Since the program began in 1991, customers have returned more than 1 billion Original HP Ink and Toner Cartridges for recycling worldwide. HP’s multi-phase closed loop recycling process uses cartridges returned through HP Planet Partners as raw material to produce new Original HP Ink and Toner Cartridges¹⁶. For more information visit the HP Supplies Recycling page: hp.com/hprecycle.

¹⁰ HP A50 Inks and A50 Bonding Agent 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.

¹¹ HP assesses known contaminants (non-intentionally added substances, NIAS) against the most conservative de minimis level published by authoritative sources such as: EU REACH, EFSA, German BfR, US EPA, CA Proposition 65, and Korea Biocidal Products Regulation (KBPR).

¹² California regulated organics list for hazardous waste.: California Code of Regulations, Title 22, Chapter 11, Article 3.

¹³ UL 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).

¹⁴ 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.

¹⁵ Program availability varies. For details, see www.hp.com/hprecycle.

¹⁶ HP combines cartridges returned through HP Planet Partners with other plastics to make new Original HP Print Cartridges and other everyday products.

HP Design for Environment (DfE) Program

In 1992, HP adopted a company-wide Design for the Environment (DFE) program that incorporates environmental impact in the design of every product and solution.

Additional Resources

More information about HP's sustainable impact programs can be found at: hp.com/go/report.

HP Safety Data Sheets (SDS) for these formulations can be found at: hp.com/go/ecodata.

For more information or questions please visit the HP Sustainability and Compliance Center at:
<https://sustainability.ext.hp.com/en/support/home>

Legal Disclaimer

Worldwide chemical regulatory requirements are subject to change without notice. Thus, HP will issue updates to this document periodically. Customers should consult their HP account manager to verify any updated information and to obtain the latest version of this document.