



# HP Brilliant Inks and HP Optimizer

HP Brilliant inks (B60 inks) and HP Optimizer are water-based formulations designed by HP to meet worldwide chemical regulatory requirements and to address a broad range of human 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 B60 Inks and HP Optimizer. HP has completed all necessary notifications and registrations to enable import and sale of HP B60 Inks and HP Optimizer 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 B60 Inks and HP Optimizer.<sup>1</sup>

### Regulated Materials

HP B60 Inks and HP Optimizer DO NOT contain the following regulated materials as intentionally added substances or known contaminants at quantities exceeding *de minimis* levels<sup>2</sup>:

- 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 colorants<sup>3</sup>
- Substances regulated as drugs and drug precursors or controlled substances requiring special permits for use
- Substances regulated under Annex XIV of EU REACH (authorizations) or restricted under Annex XVII of EU REACH (restrictions)
- Substances regulated as persistent organic pollutants and listed in Annex I of (EU) 2019/1021
- 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)
- Substances considered as chemicals of high concern to children<sup>4</sup>
- Halogenated organics with the exception of colorants and biocides
- Per- and polyfluoroalkyl substances (PFAS), including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS)
- Brominated flame retardants

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

<sup>2</sup> 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).

<sup>3</sup> 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

<sup>4</sup> As specified in the reporting list of chemicals of high concern to children (CHCC list), Washington Administrative Code (WAC) 173-334-130

- Phthalates, including ortho-phthalates
- Bisphenol A (BPA)
- Asbestos
- Polychlorinated terphenyls (PCTs)
- 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 atoms.<sup>5</sup>

## Human Health and Environmental Attributes

### Emissions

HP B60 Inks and HP Optimizer do not contain Hazardous Air Pollutants (HAPs)<sup>6</sup> or photo chemically reactive solvents.<sup>7</sup> Volatile Organic Compounds (VOC) content for HP B60 inks and Optimizer is 105-138 grams/liter according to EPA Method 24. In addition, VOC content has been calculated as < 5 grams/liter based on 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.

### Human and Ecological Health

HP B60 Inks and HP Optimizer do not contain intentionally added components or known contaminants exceeding *de minimis* levels<sup>8</sup> in the following categories:

- 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
- Substances requiring risk evaluations under Section 6 of US TSCA
- California Proposition 65 listed chemicals present in concentrations exceeding labeling thresholds
- 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) by the "candidate list" established under Article 59(1) of EU REACH
- 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.

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<sup>5</sup> 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

<sup>6</sup> HP B60 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.

<sup>7</sup> As defined by California South Coast Air Quality Management District Regulation 1

<sup>8</sup> 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).

## Transportation and Waste

HP B60 Inks and HP Optimizer are non-flammable, non-combustible<sup>9</sup>, 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 B60 Inks and HP Optimizer do not contain the following substances above *de minimis* levels<sup>10</sup> 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 Organics<sup>11</sup>
- Human health and/or ecological toxicity characteristics, as defined by the EU Classification, Labelling, and Packaging (CLP) Regulation 1272/2008/EC

## Certifications

HP B60 Inks and HP Optimizer have qualified for certifications that demonstrate adherence to some of the most rigorous and comprehensive indoor air quality standards for low chemical emissions.

## Recyclability

HP's recycling program, HP Planet Partners, allows for recycling of B60 Inks and HP Optimizer printheads<sup>12,13</sup> Since the program began in 1991, customers have returned more than 916 million 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 Cartridges<sup>14</sup>. For more information visit the HP Supplies Recycling page: [hp.com/hprecycle](http://hp.com/hprecycle)

## 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](http://hp.com/go/report)

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

For more information or questions please visit the HP Sustainability and Compliance Center at: [hp.com/go/SCC](http://hp.com/go/SCC)

## 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.

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<sup>9</sup> HP B60 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.

<sup>10</sup> 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).

<sup>11</sup> California regulated organics list for hazardous waste.: California Code of Regulations, Title 22, Chapter 11, Article 3

<sup>12</sup> Visit [hp.com/recycle](http://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.

<sup>13</sup> Program availability varies. For details, see [www.hp.com/hprecycle](http://www.hp.com/hprecycle).

<sup>14</sup> HP combines cartridges returned through HP Planet Partners with other plastics to make new Original HP Print Cartridges and other everyday products.