

# HP CV150 Water Based Inks and Bonding Agent

## *Summary of Regulatory Compliance and Environmental Attributes*



### Introduction

HP CV150 Water Based Inks and 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

#### Chemical Inventory Status

The following countries have chemical inventory requirements, and the HP CV150 Water Based Inks and Bonding Agent can be imported without restriction:

- Australia (AICS)
- Canada (DSL/NDSL) and the province of Ontario
- China (IECSC)
- Japan<sup>1</sup> (ISHL)
- Korea (KECI, K-REACH)
- New Zealand (NZIoC)
- Switzerland (ChemO)
- Philippines (PICCS)
- United States (TSCA)
- EU REACH: HP is positioned to comply with obligations to support EU REACH

#### Regulated Materials

HP CV150 Water Based Inks and Bonding Agent do not contain the following regulated materials:

- Arsenic, antimony, soluble barium, cadmium, chromium, cobalt, mercury, lead, nickel, copper<sup>2</sup>, and selenium as intentionally added ingredients
- Restricted azo colorants<sup>3</sup>
- 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)
- Halogenated organics
- Phthalates as intentionally added ingredients or as known contaminants
- Asbestos as an intentionally added ingredient
- Brominated Flame Retardants (BFR) as an intentionally added ingredient

### Health and Environmental Performance

#### Emissions

HP CV150 Water Based inks and Bonding Agent do not contain Hazardous Air Pollutants (HAPs) intentionally added.

<sup>1</sup> For more information on Japan's compliance status, please contact HP

<sup>2</sup> Copper is only present in the cyan ink and is present in a bound form as copper phthalocyanine.

<sup>3</sup> 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.

HP CV150 Water Based Inks and Bonding Agent allow HP customers to produce odorless prints.<sup>4</sup>

Volatile Organic Content (VOC) content for CV150 Water Based inks and Bonding Agent is <110 gram/liter (by EPA Method 24). Cleaning and maintenance procedures are designed for minimal VOC emissions and comply with regulations in the United States.

All HP CV150 Water Based inks and Bonding Agent contain less than 10 gr/lit according to EU 2010/75 definition.

## Human and Ecological Health

HP CV150 Water Based Inks and Bonding Agent do not contain intentionally added components in the following categories:

- Carcinogens, mutagens, or reproductive toxicants (CMRs);
- 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; and
- Substances identified as "very persistent and/or very bioaccumulative" (VPVB) according to EU REACH criteria.
- Substances classified per EuPIA Exclusion Policy for Printing Inks and Related Products, 3rd ed., Nov 2016

## Transportation and Waste

HP CV150 Water Based Inks and Bonding Agent are non-flammable, non-combustible<sup>5</sup>, 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 CV150 Water Based Inks and Bonding Agent do not contain the following substances and/or characteristics associated with hazardous waste:

- Regulated Metals: Arsenic, antimony, soluble barium, cadmium, chromium, cobalt, mercury, lead, nickel, copper<sup>6</sup>, and selenium as intentionally added ingredients
- Regulated Organics<sup>7</sup>
- Halogenated Organic Compounds
- Human health and/or ecological toxicity characteristics impacting waste profile

<sup>4</sup> Organoleptic testing according to EN-1230-1,2 (Robinson method) was completed on these inks and passed. The sensory evaluation: triangle test (DIN EN 4120)

<sup>5</sup> HP CV150 Water Based Inks and 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>6</sup> Copper is only present in the cyan ink and is present in a bound form as copper pthalocyanine.

<sup>7</sup> California regulated organics list for hazardous waste: California Code of Regulations, Title 22, Chapter 11, Article



## Specialty Applications

### Food Packaging

HP CV150 Water Based Inks and Bonding Agent are intended for printing on the external side of corrugated paperboard packaging and can comply with US & European regulations and industry guidance

- US FDA 21CFR 170-199
- EU Framework Regulation 1935/2004/EC (incl. EC GMP 2023/2006)
- SR 817.0, Article 21 Section 4 or Article 26(i) of the Swiss Ordinance 817.023.21 (Annex 10 and 2)
- EuPIA Guidance for Risk Assessment of Non-Intentionally Added Substances (NIAS) and Non-Listed Substances (NLS) in Printing Inks for Food Contact Materials, January 2017
- Organoleptic testing according to EN-1230-1,2 (Robinson method) was completed on these inks and passed. The sensory evaluation: triangle test (DIN EN 4120)
- Nestle Guidance Note on Packaging Inks, October 2018
- Nestle Standards on Materials in Contact with Food, v5, October 2018
- Japanese Printing Ink Manufacturing Exclusion List: May 1, 2018

HP CV150 Water Based Inks and Bonding Agent have been assessed for corrugated packaging food packaging applications in Europe and the United States. Detailed information related to the Statement of Composition for the formulations may be shared upon request and under a confidentiality agreement.

### Toy Packaging

Typical corrugate packaging generally consists of paperboards, inks, coatings, and adhesives. Some printing applications may include packaging configurations for toys and incorporate regulatory requirements set forth in the the Consumer Product Safety Improvement Act (CPSIA, 2008), CFR §1500.91. To the extent that packaging produced using HP inks could be considered children's products, the HP CV150 Water Based Inks and HP CV150 Water Based Bonding Agent do not require testing for compliance with the lead content limit because the Consumer Product Safety Commission determined by regulation that these materials consistently meet the CPSIA lead content limit and are, therefore, exempt from any related testing requirements. Additionally, HP confirms that the CV150 Water Based Inks and Bonding Agent supplies do not contain > 0.1 ppm of lead<sup>8</sup>.

## Recyclability

All HP CV150 Water Based Inks and Bonding Agent printheads are taken back and treated by HP.

All HP CV150 Water Based Inks and Bonding Agent 200-liter drums can be recycled. HP CV150 Inks and Bonding Agent have been shown to be "Recyclable" across a wide range of papers per PTS-Method PTS-RH 21/97 "Identification of the recyclability of paper and board packages and of graphic print products".

<sup>8</sup> The CPSIA's requirements for lead content are in addition to other statutory and regulatory requirements for children's art materials. Compliance under the Labeling of Hazardous Art Materials Act (LHAMA) (15 U.S.C.1277) requires the submission of art material product formulations to a toxicologist for review to assess chronic adverse health effects through customary or reasonably foreseeable use. HP's current compliance position with regard to CPSIA does not infer compliance with LHAMA or other regulations outside of the CPSIA, section 1500.

## Certifications



UL ECOLOGO® Certified that HP CV150 Inks and Bonding Agent meet a range of stringent human health criteria.<sup>9</sup>

## 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 entire data centers. For more information about HP's social and environmental responsibility programs, see [www.hp.com/livingprogress](http://www.hp.com/livingprogress).

<sup>9</sup> 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](http://ul.com/EL)).

