

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)
- Korea (KECI, K-REACH)
- New Zealand (NZIoC)
- Switzerland (ChemO)
- Taiwan (Taiwan REACH)
- 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, copper¹, and selenium as intentionally added ingredients
- Restricted azo colorants²
- 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)
- Phalates 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.

HP CV150 Water Based Inks and Bonding Agent allow HP customers to produce odorless prints.³

¹ Copper is only present in the cyan ink and is present in a bound form as copper pthalocyanine.

² 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.

³ 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)

Volatile Organic Content (VOC) content for CV150 Water Based inks and Bonding Agent is <120 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 and shipping fluid contain less than 10 gr/lit according to EU 2010/75 definition

Human and Ecological Health

HP CV150 Water Based Inks and Bonding Agent are considered non-hazardous according to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS, as implemented by the EU Classification, Labeling and Packing Regulation No1272/2008/EC (CLP)), US HazCom 2012, and other country-specific GHS regulations.

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.

Transportation and Waste

HP CV150 Water Based Inks and Bonding Agent 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 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, copper⁵, and selenium as intentionally added ingredients
- Regulated Organics⁶
- Halogenated Organic Compounds
- Human health and/or ecological toxicity characteristics impacting waste profile

⁴ 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.

⁵ Copper is only present in the cyan ink and is present in a bound form as copper pthalocyanine.

⁶ California regulated organics list for hazardous waste: California Code of Regulations, Title 22, Chapter 11, Article 3.



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)
- Swiss Ordinance 817.023.21, Annex 10 and 2.
- EUPIA Guidance; Components in these inks are not listed on the EuPIA Exclusion List 3rd edition, Nov 2016.
- 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 guidelines (2016).
- Components in these inks are not listed on the Japanese Printing Ink Manufacturing Exclusion List: May 1, 2018
- Components in these inks are not listed on the TetraPak Negative list

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 lead⁷.

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 can provide 3rd party contact information to our customers.

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.

⁷ 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.