



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** C2P23Series  
**Other means of identification** Not available.  
**Recommended use** Inkjet printing  
**Recommended restrictions** None known.  
**Issue date** 20-Jun-2014  
**Company identification** Hewlett-Packard Company  
3000 Hanover Street  
Palo Alto, CA 94304-1185  
United States  
Telephone 650-857-5020  
  
Hewlett-Packard health effects line  
(Toll-free within the US) 1-800-457-4209  
(Direct) 1-760-710-0048  
HP Customer Care Line  
(Toll-free within the US) 1-800-474-6836  
(Direct) 1-208-323-2551  
Email: hpcustomer.inquiries@hp.com

## 2. Hazard(s) identification

**Physical hazards** Not classified.  
**Health hazards** Not classified.  
**OSHA hazard(s)** Not classified.

### Label elements

**Hazard symbol** No symbol.  
**Signal word** Not available.  
**Hazard statement** Not available.  
**Precautionary statement**  
**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

## 3. Composition/information on ingredients

### Mixtures

#### Hazardous components

Chemical name	CAS number	%
2-pyrrolidone	616-45-5	< 15

#### Non-hazardous components

Chemical name	CAS number	%
Water	7732-18-5	> 70
Co-Solvent*	Proprietary*	< 10
Carbon Black Colorant	1333-86-4	< 5

### Composition comments

This ink supply contains an aqueous ink formulation.  
This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

Carbon black is present only in a bound form in this preparation.

---

#### 4. First-aid measures

<b>Inhalation</b>	Remove to fresh air. If symptoms persist, get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.

---

#### 5. Fire-fighting measures

<b>Flash point</b>	> 230.00 °F (> 110.00 °C) Pensky-Martens Closed Cup
<b>Suitable extinguishing media</b>	For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Not applicable.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Specific methods</b>	None established.

---

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</b>	Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

---

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin, eyes and clothing.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

---

#### 8. Exposure controls/personal protection

##### Occupational exposure limits

##### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Carbon Black Colorant (CAS 1333-86-4)	PEL	3.5 mg/m <sup>3</sup>

##### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon Black Colorant (CAS 1333-86-4)	TWA	3 mg/m <sup>3</sup>	Inhalable fraction.

##### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Carbon Black Colorant (CAS 1333-86-4)	TWA	0.1 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Use in a well ventilated area.

##### Individual protection measures, such as personal protective equipment

**Eye/face protection** Not available.

##### Skin protection

**Hand protection** Not available.

**Other** Not available.

---

<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

---

## 9. Physical and chemical properties

<b>Appearance</b>	Not available.
<b>Physical state</b>	Liquid.
<b>Color</b>	Black.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	7.5 - 9
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	> 230.00 °F (> 110.00 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Solubility(ies)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	For other VOC regulatory data/information see Section 15.
<b>Oxidizing properties</b>	Not determined
<b>VOC (Weight %)</b>	< 229 g/L

---

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Not available.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

---

## 11. Toxicological information

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Not available.
<b>Information on toxicological effects</b>	
<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.

<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black Colorant (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Further information</b>	Complete toxicity data are not available for this specific formulation Refer to Section 2 for potential health effects and Section 4 for first aid measures.

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Carbon Black Colorant (CAS 1333-86-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 8000 mg/kg

## 12. Ecological information

**Aquatic toxicity** This product has not been tested for ecological effects.

### Ecotoxicity

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Aquatic</b>		
Crustacea	EC50 Water flea ( <i>Daphnia pulex</i> )	13.21 mg/l, 48 hours
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol / water (log Kow)</b>		
2-pyrrolidone	-0.85	
<b>Mobility in soil</b>	Not available.	
<b>Other adverse effects</b>	Not available.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
<b>Local disposal regulations</b>	Not available.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Not available.
<b>Contaminated packaging</b>	Not available.

---

## 14. Transport information

### DOT

Not regulated as a hazardous material by DOT.

### IATA

Not regulated as a dangerous good.

### IMDG

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available.

---

## 15. Regulatory information

**US federal regulations** US TSCA 12(b): Does not contain listed chemicals.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not on regulatory list.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

#### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

#### DEA Exempt Chemical Mixtures Code Number

Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

### US state regulations

#### US. Massachusetts RTK - Substance List

2-pyrrolidone (CAS 616-45-5)  
Carbon Black Colorant (CAS 1333-86-4)

#### US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

#### US. Pennsylvania RTK - Hazardous Substances

2-pyrrolidone (CAS 616-45-5)  
Carbon Black Colorant (CAS 1333-86-4)

#### US. Rhode Island RTK

Carbon Black Colorant (CAS 1333-86-4)

#### US. California Proposition 65

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**  
Carbon Black Colorant (CAS 1333-86-4)

---

<b>Other information</b>	VOC content (less water, less exempt compounds) = < 884 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)
<b>Regulatory information</b>	All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

## 16. Other information, including date of preparation or last revision

<b>Issue date</b>	20-Jun-2014
<b>Version #</b>	01
<b>Further information</b>	Not available.
<b>Disclaimer</b>	This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.
<b>Revision Information</b>	Toxicological information: Carcinogenicity
<b>Manufacturer information</b>	Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304-1112 US (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209

## Explanation of abbreviations

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds