



# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** HP Color LaserJet CF321A-AC Cyan Print Cartridge  
**Registration number** -  
**Synonyms** None.  
**Issue date** 20-Sep-2014  
**Version number** 01

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** This product is a cyan toner preparation that is used in HP Color LaserJet Enterprise Flow MFF M680 series printers.

**Uses advised against** None known.

**Company identification** Hewlett-Packard, Ltd.  
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Bracknell, Berkshire, RG12 1HN  
Telephone 44 (0) 879 013 0790

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  
Poison Information Center 0207771 5307

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 as amended**

**Classification according to Directive 67/548/EEC or 1999/45/EC as amended**

#### Hazard summary

**Physical hazards** Not classified for physical hazards.  
**Health hazards** Not classified as a health hazard.  
**Environmental hazards** Not classified for hazards to the environment.  
**Specific hazards** Not available.  
**Main symptoms** Not available.

### 2.2. Label elements

**Label according to Regulation (EC) No. 1272/2008 as amended**

**Contains:** Amorphous silica, Pigment, Styrene acrylate copolymer, Wax  
**Hazard pictograms** None.  
**Signal word** None.  
**Hazard statements** The mixture does not meet the criteria for classification.

#### Precautionary statements

**Prevention** Not available.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Supplemental label information** None.

### 2.3. Other hazards

This product is not classified as hazardous according to OSHA CFR 1910.1200 or EU Directive 1999/45/EC, as amended. This preparation contains no component classified as Persistent, Bioaccumulative, and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) as defined under Regulation (EC) 1907/2006. None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Styrene acrylate copolymer	- < 90	Trade Secret	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Pigment	- < 10	Trade Secret	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Wax	- < 10	Trade Secret	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				
Amorphous silica	< 3	7631-86-9 231-545-4	-	-	
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				

## SECTION 4: First aid measures

**General information** Not available.

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move person to fresh air immediately. If irritation persists, consult a physician.
<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, consult a physician.
<b>Ingestion</b>	Rinse mouth out with water. Drink one to two glasses of water. If symptoms occur, consult a physician.

**4.2. Most important symptoms and effects, both acute and delayed** Not available.

**4.3. Indication of any immediate medical attention and special treatment needed** Not available.

## SECTION 5: Firefighting measures

**General fire hazards** Not available.

### 5.1. Extinguishing media

**Suitable extinguishing media** CO<sub>2</sub>, water, or dry chemical

**Unsuitable extinguishing media** None known.

**5.2. Special hazards arising from the substance or mixture** Not available.

### 5.3. Advice for firefighters

<b>Special protective equipment for firefighters</b>	Not available.
<b>Special fire fighting procedures</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Specific methods</b>	None established.

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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Minimize dust generation and accumulation.
<b>For emergency responders</b>	Not available.

**6.2. Environmental precautions** Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.

**6.3. Methods and material for containment and cleaning up** Not available.

**6.4. Reference to other sections** Not available.

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## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Keep out of the reach of children. Avoid inhalation of dust and contact with skin and eyes. Use with adequate ventilation. Keep away from excessive heat, sparks, and open flames.

**7.2. Conditions for safe storage, including any incompatibilities** Keep out of the reach of children. Keep tightly closed and dry. Store away from strong oxidizers. Store at room temperature.

**7.3. Specific end use(s)** Not available.

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Recommended monitoring procedures</b>	Not available.
<b>Derived no-effect level (DNEL)</b>	Not available.
<b>Predicted no effect concentrations (PNECs)</b>	Not available.

**Exposure guidelines**

USA OSHA (TWA/PEL): 15 mg/m<sup>3</sup> (Total Dust), 5 mg/m<sup>3</sup> (Respirable Fraction)

ACGIH (TWA/TLV): 10 mg/m<sup>3</sup> (Inhalable Particulate), 3 mg/m<sup>3</sup> (Respirable Particulate)

Amorphous silica: USA OSHA (TWA/PEL): 20 mppcf 80 (mg/m<sup>3</sup>)/%SiO<sub>2</sub>, ACGIH (TWA/TLV): 10 mg/m<sup>3</sup>

TRGS 900 (Luftgrenzwert) - 10 mg/m<sup>3</sup> (Einatembare partikel), 3 mg/m<sup>3</sup> (Alveolengängige fraktion)

UK WEL: 10 mg/m<sup>3</sup> (Respirable Dust), 5 mg/m<sup>3</sup> (Inhalable Dust)

### 8.2. Exposure controls

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

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

<b>General information</b>	No personal respiratory protective equipment required under normal conditions of use.
<b>Eye/face protection</b>	Not available.
<b>Skin protection</b>	
- Hand protection	Not available.
- Other	Not available.
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.

**Hygiene measures** Not available.

Environmental exposure controls Not available.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Fine powder
Physical state	Solid.
Color	Cyan
Odor	Slight plastic odor
Odor threshold	Not available.
pH	Not applicable
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not flammable
Flammability limit - upper (%)	Not available.
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Negligible in water. Partially soluble in toluene and xylene.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable
Decomposition temperature	> 392 °F (> 200 °C)
Viscosity	Not applicable
Explosive properties	Not available.
Oxidizing properties	No information available.
9.2. Other information	
Percent volatile	0 % estimated
Softening point	176 - 266 °F (80 - 130 °C)
Specific gravity	1 - 1.2

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## SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Stable under normal storage conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Imaging Drum: Exposure to light
10.5. Incompatible materials	Strong oxidizers
10.6. Hazardous decomposition products	Carbon monoxide and carbon dioxide.

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## SECTION 11: Toxicological information

General information	Not available.
11.1. Information on toxicological effects	
Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.
Respiratory sensitization	Not available.

<b>Skin sensitization</b>	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.
<b>Germ cell mutagenicity</b>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)
<b>Carcinogenicity</b>	Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).
<b>Reproductive toxicity</b>	Not classified as toxic according to EU Directive 67/548/EEC and as amended, California Prop. 65, and DFG (Germany).
<b>Specific target organ toxicity - single exposure</b>	Not available.
<b>Specific target organ toxicity - repeated exposure</b>	Not available.
<b>Aspiration hazard</b>	Not available.

Components	Species	Test Results
Amorphous silica (CAS 7631-86-9)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg
<b>Mixture versus substance information</b>	Not available.	
<b>Other 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.	

## SECTION 12: Ecological information

<b>Aquatic toxicity</b>	Not available
<b>12.1. Toxicity</b>	LC50: > 100 mg/l, Fish, 96.00 Hours

Product	Species	Test Results
CF321A-AC		
<b>Aquatic</b>		
Fish	LC50 Fish	> 100 mg/l, 96 Hours
<b>12.2. Persistence and degradability</b>	Not available.	
<b>12.3. Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.	
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	Not available.	
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.	
<b>12.6. Other adverse effects</b>	This product has not been tested for ecological effects.	

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Not available.
<b>Contaminated packaging</b>	Not available.
<b>EU waste code</b>	Not available.
<b>Disposal methods/information</b>	Do not shred toner cartridge, unless dust-explosion prevention measures are taken. Finely dispersed particles may form explosive mixtures in air. Dispose of in compliance with federal, state, and local 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 <http://www.hp.com/recycle>.

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## SECTION 14: Transport information

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

**Further information** Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

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## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA**

Not listed.

#### Authorizations

**Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorization**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not regulated.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Not regulated.

#### Other EU regulations

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not regulated.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Not regulated.

**Directive 94/33/EC on the protection of young people at work**

Not regulated.

#### Other regulations

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.

#### National regulations

Not available.

#### 15.2. Chemical safety assessment

Not available.

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## SECTION 16: Other information

<b>References</b>	Not available.
<b>Information on evaluation method leading to the classification of mixture</b>	Not available.
<b>Full text of any statements or R-phrases and H-statements under Sections 2 to 15</b>	None.
<b>Revision information</b>	1. Product and Company Identification: Alternate Trade Names 9. Physical & Chemical Properties: Multiple Properties
<b>Training 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>Issue date</b>	20-Sep-2014
<b>Manufacturer information</b>	Hewlett-Packard Company 11311 Chinden Boulevard Boise, ID 83714 USA (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209
<b>Explanation of abbreviations</b>	
<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
<b>List of abbreviations</b>	Not available.