



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** HP Color LaserJet CF311A Cyan Print Cartridge  
**Version #** 02  
**Issue date** 25-Oct-2013  
**Revision date** 06-Nov-2013  
**Product use** This product is a cyan toner preparation that is used in HP Color LaserJet Enterprise M855 series printers.  
**Company identification** Hewlett-Packard Company  
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## 2. Hazards Identification

### Potential health effects

**Eyes** May cause transient slight irritation

**Skin** Unlikely to cause skin irritation.

**Inhalation** Minimal respiratory tract irritation may occur with exposure to large amounts of toner dust. Use of this product as intended does not result in inhalation of excessive amounts of dust.

**Ingestion** Low acute toxicity. Ingestion is a minor route of entry for intended use of this product.

**Other hazards** This product is not classified as hazardous according to OSHA CFR 1910.1200 or EU Directive 1999/45/EC, as amended. None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.

## 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
Styrene acrylate copolymer	Trade Secret	<90
Pigment	Trade Secret	<10
Wax	Trade Secret	<10
Amorphous silica	7631-86-9	<3

## 4. First Aid Measures

**General advice** No information

### First aid procedures

**Eye contact** 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.

**Skin contact** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

**Inhalation** Move person to fresh air immediately. If irritation persists, consult a physician.

**Ingestion** Rinse mouth out with water. Drink one to two glasses of water. If symptoms occur, consult a physician.

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## 5. Fire Fighting Measures

<b>Flammable properties</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	CO <sub>2</sub> , water, or dry chemical
<b>Unsuitable extinguishing media</b>	None known.
<b>Fire fighting equipment/instructions</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Specific methods</b>	None established.
<b>Hazardous combustion products</b>	Carbon monoxide and carbon dioxide.

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## 6. Accidental Release Measures

<b>Personal precautions</b>	Minimize dust generation and accumulation.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.
<b>Other information</b>	Slowly vacuum or sweep the material into a bag or other sealed container. Clean remainder with a damp cloth or vacuum cleaner. If a vacuum is used, the motor must be rated as dust explosion-proof. Fine powder can form explosive dust-air mixtures. Dispose of in compliance with federal, state, and local regulations.

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## 7. Handling and Storage

<b>Handling</b>	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.
<b>Storage</b>	Keep out of the reach of children. Keep tightly closed and dry. Store away from strong oxidizers. Store at room temperature.

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## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

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

Components	Type	Value
Amorphous silica (CAS 7631-86-9)	TWA	6 mg/m <sup>3</sup>

<b>Exposure guidelines</b>	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>
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**Engineering controls** Use in a well ventilated area.

### Personal protective equipment

**General** No personal respiratory protective equipment required under normal conditions of use.

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## 9. Physical & Chemical Properties

<b>Appearance</b>	Fine powder
<b>Physical state</b>	Solid.
<b>Form</b>	solid
<b>Color</b>	Cyan
<b>Odor</b>	Slight plastic odor
<b>pH</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Melting point/Freezing point</b>	Not available.

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<b>Solubility (water)</b>	Negligible in water. Partially soluble in toluene and xylene.
<b>Specific gravity</b>	1 - 1.2
<b>Flash point</b>	Not applicable
<b>Viscosity</b>	Not applicable
<b>Percent volatile</b>	0 % estimated
<b>Softening point</b>	176 - 266 °F (80 - 130 °C)
<b>VOC</b>	Not available
<b>Other information</b>	No information available
<b>Other data</b>	
<b>Decomposition temperature</b>	> 392 °F (> 200 °C)

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under normal storage conditions.
<b>Conditions to avoid</b>	Imaging Drum: Exposure to light
<b>Incompatible materials</b>	Strong oxidizers
<b>Hazardous decomposition products</b>	Carbon monoxide and carbon dioxide.
<b>Possibility of hazardous reactions</b>	Will not occur.

## 11. Toxicological Information

### Toxicological data

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>Sensitization</b>	Not classified as a sensitizer according to EU Directive 67/548/EEC and as amended, and OSHA HCS (US).	
<b>Chronic effects</b>	No information available.	
<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>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Amorphous silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.	
<b>Serious eye damage/eye irritation</b>	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.	
<b>Mutagenicity</b>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)	
<b>Reproductive effects</b>	Not classified as toxic according to EU Directive 67/548/EEC and as amended, California Prop. 65, and DFG (Germany).	
<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.	

## 12. Ecological Information

### Ecotoxicological data

Product	Species	Test Results
CF311A		
Fish	LC50 Fish	> 100 mg/l, 96 Hours
<b>Ecotoxicity</b>	LC50: > 100 mg/l, Fish, 96.00 Hours	
<b>Persistence and degradability</b>	Not available.	

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## 13. Disposal Considerations

**Disposal instructions** 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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## 14. Transport Information

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

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## 15. Regulatory Information

**US federal regulations** US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

**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.

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

Not regulated.

**CERCLA (Superfund) reportable quantity**

None

**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 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.

**State regulations**

**US. Massachusetts RTK - Substance List**

Amorphous silica (CAS 7631-86-9)

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**US. Rhode Island RTK**

Not regulated.

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## 16. Other Information

**HMIS® ratings** Health: 1  
Flammability: 1  
Physical hazard: 0

**NFPA ratings** Health: 1  
Flammability: 1  
Instability: 0

**Disclaimer**

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.

**Other information**

This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

**Issue date**

25-Oct-2013

**Manufacturer information**

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**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