



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** HP Color LaserJet CF320A-X-XC Black Print Cartridge

**Other means of identification** None.

**Recommended use** This product is a black toner preparation that is used in HP Color LaserJet Enterprise M651/ HP Color LaserJet Enterprise Flow MFP M680 series printers.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**  
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## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**Label elements**

- Hazard symbol** None.
- Signal word** None.
- Hazard statement** Not available.
- Precautionary statement**
  - Prevention** Not available.
  - Response** Not available.
  - Storage** Not available.
  - Disposal** Not available.

**Other hazards which do not result in classification** Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Hazardous components			
Chemical name	Common name and synonyms	CAS number	%
Titanium dioxide		13463-67-7	<1
Non-hazardous components			
Chemical name	Common name and synonyms	CAS number	%
Styrene acrylate copolymer		Trade Secret	<85
Carbon black		1333-86-4	<10
Wax	Wax	Trade Secret	<10
Amorphous silica	Amorphous silica	7631-86-9	<3

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#### 4. 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.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.

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#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	CO2, water, or dry chemical
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Fire fighting equipment/instructions</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Specific methods</b>	None established.

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#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Minimize dust generation and accumulation.
<b>Methods and materials for containment and cleaning up</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.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.

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#### 7. Handling and storage

<b>Precautions for safe 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>Conditions for safe storage, including any incompatibilities</b>	Keep out of the reach of children. Keep tightly closed and dry. Store at room temperature. Store away from strong oxidizers.

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#### 8. Exposure controls/personal protection

##### Occupational exposure limits

###### Vietnam. OELs

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	STEL	7 mg/m3	
	TWA	3.5 mg/m3	
Titanium dioxide (CAS 13463-67-7)	STEL	10 mg/m3	Inhalable dust.
	TWA	6 mg/m3 5 mg/m3	Inhalable dust. Respirable dust.

###### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

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

<b>Exposure guidelines</b>	, 5 mg/m <sup>3</sup> (Respirable Fraction)
	, 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)

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

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

<b>Eye/face protection</b>	Not available.
<b>Skin protection</b>	
<b>Hand protection</b>	Not available.
<b>Other</b>	Not available.
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.

**9. Physical and chemical properties**

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

**10. Stability and reactivity**

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under normal storage conditions.

<b>Possibility of hazardous reactions</b>	Will not occur.
<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.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Skin contact</b>	Contact with skin may result in mild irritation.
<b>Eye contact</b>	Contact with eyes may result in mild irritation.
<b>Ingestion</b>	Ingestion is not a likely route of exposure.

**Symptoms related to the physical, chemical and toxicological characteristics** Not available.

### Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

Components	Species	Test Results
Carbon black (CAS 1333-86-4)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 10000 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

### Respiratory or skin sensitization

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)  
Based on available data, the classification criteria are not met.

**Carcinogenicity** 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. Carbon black is present only in a bound form in this preparation. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

### ACGIH Carcinogens

Carbon black (CAS 1333-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Further information** 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

**Ecotoxicity** LC50: > 100 mg/l, Fish, 96.00 Hours

Product	Species	Test Results
CF320A-X-XC		
<b>Aquatic</b>		
Fish	LC50	Fish > 100 mg/l, 96 Hours
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulative potential</b>	Not available.	
<b>Mobility in soil</b>	Not available.	
<b>Other adverse effects</b>	This product has not been tested for ecological effects.	

### 13. Disposal considerations

<b>Disposal instructions</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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
<b>Waste from residues / unused products</b>	Not available.
<b>Contaminated packaging</b>	Not available.

### 14. Transport information

<b>Further information</b>	Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
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### 15. Regulatory information

#### National regulations

##### Ozone Depleting Substances (ODS) Joint circular No. 14/2005/TTLT-BTM-BTNMT

Not regulated.

##### Vietnam. Chemicals that must be declared (Decree No. 108/2008/ND-CP, App. 5, Oct. 7, 2008, as amended through Decree No. 26/2011/ND-CP, April 8, 2011)

Amorphous silica (CAS 7631-86-9)

##### Vietnam. Toxic Chemicals Requiring Sale & Purchase Control Slips (Decree No. 26/2011/ND-CP, App. 6, April 8, 2011)

Not regulated.

##### Vietnam. CWC (Decree No. 100/2005/ND-CP, Implementation of Chemical Weapons Convention, Appendix 1, Schedules 1-3, August 3, 2005)

Not regulated.

##### Vietnam. Drug Precursor & Essential Substances (Decree No. 67/2001/ND-CP, List IV, as amended through Decree No. 17/2011/ND-CP, Feb. 22, 2011)

Not regulated.

#### International 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.

##### Stockholm Convention

Not applicable.

##### Rotterdam Convention

Not applicable.

##### Montreal Protocol

Not applicable.

##### Kyoto protocol

Not applicable.

##### Basel Convention

Not applicable.

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

<b>Issue date</b>	19-Oct-2016
<b>Revision date</b>	28-Aug-2018
<b>Version #</b>	02

**Disclaimer**

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**Revision information**

Fire-fighting measures: Specific hazards arising from the chemical  
Accidental release measures: Methods and materials for containment and cleaning up  
Toxicological information: Eye contact  
Toxicological information: Ingestion  
Toxicological information: Inhalation  
Toxicological information: Skin contact  
Other information, including date of preparation or last revision: Disclaimer

**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