



# 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 CF320A-X-XC Black Print Cartridge  
**Registration number** -  
**Synonyms** None.  
**Issue date** 19-Nov-2014  
**Version number** 05  
**Revision date** 18-Sep-2015  
**Supersedes date** 25-Jun-2015

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

**Identified uses** 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.

**Uses advised against** None known.

**Company identification** Hewlett-Packard Ireland Limited  
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Leixlip, Ireland NA  
Telephone 01 6150000

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OPTIONAL: +353 1 8092566

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

### 2.2. Label elements

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

**Contains:** Amorphous silica, Carbon black, Styrene acrylate copolymer, Titanium dioxide, 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 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.

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.

## 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	<85	Trade Secret -	-	-	
<b>Classification:</b>	-				
Carbon black	<10	1333-86-4 215-609-9	01-2119384822-32-XXXX	-	
<b>Classification:</b>	-				
Wax	<10	Trade Secret -	-	-	
<b>Classification:</b>	-				
Amorphous silica	<3	7631-86-9 231-545-4	01-2119379499-16-xxxx	-	
<b>Classification:</b>	-				
Titanium dioxide	<1	13463-67-7 236-675-5	-	-	
<b>Classification:</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

<b>Suitable extinguishing media</b>	CO <sub>2</sub> , water, or dry chemical
<b>Unsuitable extinguishing media</b>	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 at room temperature. Store away from strong oxidizers.

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

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Ireland. Occupational Exposure Limits Components

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	STEL	7 mg/m <sup>3</sup>	
Titanium dioxide (CAS 13463-67-7)	TWA	3.5 mg/m <sup>3</sup>	Respirable dust.
	TWA	4 mg/m <sup>3</sup>	
		10 mg/m <sup>3</sup>	Total inhalable dust.

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

**Recommended monitoring procedures** Not available.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** 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.
<b>Hygiene measures</b>	Not available.
<b>Environmental exposure controls</b>	Not available.

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## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Fine powder
<b>Physical state</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>Vapor pressure</b>	Not applicable
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Negligible in water. Partially soluble in toluene and xylene.
<b>Solubility (other)</b>	Not available.
<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>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	No information available.
<b>9.2. Other information</b>	
<b>Percent volatile</b>	0 % estimated
<b>Softening point</b>	176 - 266 °F (80 - 130 °C)

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## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

**General information** Not available.

### 11.1. Information on toxicological effects

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

#### 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.

Components	Species	Test Results
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Amorphous silica (CAS 7631-86-9)

#### Acute

*Oral*

LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg

Carbon black (CAS 1333-86-4)

#### Acute

*Oral*

LD50	Rat	> 8000 mg/kg
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**Mixture versus substance information** Not available.

**Other 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.

## SECTION 12: Ecological information

**12.1. Toxicity** 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

Components	Species	Test Results
Titanium dioxide (CAS 13463-67-7)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus) > 1000 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>	Not available.

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## 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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .

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## SECTION 14: Transport information

<b>Further information</b>	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.

**Other information**

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

**National regulations**

Not available.

**15.2. Chemical safety assessment**

Not available.

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**SECTION 16: Other information**

**References**

Not available.

**Information on evaluation method leading to the classification of mixture**

Not available.

**Issue date**

19-Nov-2014

**Revision information**

SECTION 16: Other information: Disclaimer

**Training information**

Not available.

**Disclaimer**

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**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
<b>List of abbreviations</b>	Not available.