



# 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 CF451A Cyan Print Cartridge
Registration number	-
Synonyms	None.
Issue date	03-Aug-2018
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 M652 / HP Color LaserJet M681 / HP Color LaserJet M653 / HP Color LaserJet M682 series printers.
Uses advised against	None known.

### 1.3. Details of the supplier of the safety data sheet

	HP Deutschland GmbH Schickardstrasse 32 71034 Böblingen Germany
Telephone	07031 140

### HP Inc. health effects line

(Toll-free within the US)	1-800-457-4209
(Direct)	1-760-710-0048

### HP Inc. Customer Care Line

(Toll-free within the US)	1-800-474-6836
(Direct)	1-208-323-2551

Email: [hpcustomer.inquiries@hp.com](mailto:hpcustomer.inquiries@hp.com)

1.4 Emergency telephone number +49 (0) 89 1 92 40

## 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, 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 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

Material name: CF451A

14221 Version #: 01 Issue date: 03-Aug-2018

**General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Styrene acrylate copolymer	<85	Trade Secret	-	-	
<b>Classification:</b>	-	-	-	-	
Wax	<10	Trade Secret	-	-	
<b>Classification:</b>	-	-	-	-	
Pigment	<5	Trade Secret	-	-	
<b>Classification:</b>	-	-	-	-	
Amorphous silica	<3	7631-86-9 231-545-4	01-2119379499-16-xxxx	-	
<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>	CO2, water, or dry chemical
<b>Unsuitable extinguishing media</b>	None known.

**5.2. Special hazards arising from the substance or mixture** Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.

**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.

**Specific methods** None established.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** Minimize dust generation and accumulation.

**For emergency responders** 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

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.

### 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

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Amorphous silica (CAS 7631-86-9)	TWA	4 mg/m <sup>3</sup>	Inhalable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
Amorphous silica (CAS 7631-86-9)	AGW	4 mg/m <sup>3</sup>	Inhalable fraction.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Recommended monitoring procedures

Not available.

#### Derived no effect levels (DNELs)

Not available.

#### Predicted no effect concentrations (PNECs)

Not available.

#### Exposure guidelines

, 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)

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

##### General information

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

##### Eye/face protection

Not available.

##### Skin protection

##### - Hand protection

Not available.

##### - Other

Not available.

##### Respiratory protection

Not available.

##### Thermal hazards

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

Material name: CF451A

14221 Version #: 01 Issue date: 03-Aug-2018

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<b>Physical state</b>	Solid.
<b>Form</b>	solid
<b>Color</b>	Cyan
<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>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>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)
<b>Specific gravity</b>	1 - 1.2

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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.

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## SECTION 11: Toxicological information

<b>General information</b>	Not available.
<b>Information on likely routes of exposure</b>	
<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.
<b>Symptoms</b>	Not available.
<b>11.1. 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>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium) Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Amorphous silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity 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>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

**12.1. Toxicity** LC50: > 100 mg/l, Fish, 96.00 Hours

Product	Species	Test Results
CF451A		
<b>Aquatic</b>		
Algae	ErC50	Algae > 100 mg/l, 72 Hours
Crustacea	EC50	Crustacea > 100 mg/l, 48 Hours
Fish	LC50	Fish > 100 mg/l, 96 Hours

**12.2. Persistence and degradability** Not available.

**12.3. Bioaccumulative potential** Not available.

**Partition coefficient n-octanol/water (log Kow)** Not available.

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** Not available.

**12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.

**12.6. Other adverse effects** Not available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Residual waste** Not available.

**Contaminated packaging** Not available.

**EU waste code** Not available.

**Disposal methods/information** 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>.

## SECTION 14: Transport information

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

## 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 (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 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.

**Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

**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 (EU) 2015/830. Classification according to Regulation (EC) No 1272/2008 as amended.

**National regulations**

Not available.

**15.2. Chemical safety assessment**

See attached SUMI or GEIS document, if applicable.

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**SECTION 16: Other information**

**References**

Regulation (EC) No. 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency (REACH).

Regulation (EU) 2015/830 of May 28, 2015 amending Regulation (EC) No. 1907/2006.

Regulation (EC) No. 1272/2008 of December 16, 2008 on classification, labeling and packaging of substances and mixtures, and amendments (CLP).

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

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

**Full text of any H-statements not written out in full under Sections 2 to 15**

None.

**Revision information**

None.

**Training information**

Follow training instructions when handling this material.

## Disclaimer

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP 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.

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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