



SAFETY DATA SHEET

1. Identification

Product identifier HP Color LaserJet CF451A Cyan Print Cartridge

Other means of identification None.

Recommended use 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.

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.

OSHA defined 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.

Hazard(s) not otherwise classified (HNOC) None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.

Supplemental information This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Styrene acrylate copolymer		Trade Secret	<85
Wax	Wax	Trade Secret	<10
Pigment	Pigment	Trade Secret	<5
Amorphous silica	Amorphous silica	7631-86-9	<3

4. First-aid measures

Inhalation	Move person to fresh air immediately. 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.
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.
Ingestion	Rinse mouth out with water. Drink one to two glasses of water. If symptoms occur, consult a physician.
Most important symptoms/effects, acute and delayed	Not available.

5. Fire-fighting measures

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

6. Accidental release measures

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

7. Handling and storage

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.
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.

8. Exposure controls/personal protection

Occupational exposure limits This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Amorphous silica (CAS 7631-86-9)	TWA	6 mg/m3

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	USA OSHA (TWA/PEL): 15 mg/m3 (Total Dust), 5 mg/m3 (Respirable Fraction) ACGIH (TWA/TLV): 10 mg/m3 (Inhalable Particulate), 3 mg/m3 (Respirable Particulate) Amorphous silica: USA OSHA (TWA/PEL): 20 mppcf 80 (mg/m3)/%SiO2, ACGIH (TWA/TLV): 10 mg/m3 TRGS 900 (Luftgrenzwert) - 10 mg/m3 (Einatembare partikel), 3 mg/m3 (Alveolengängige fraktion)

Appropriate engineering controls Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

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

9. Physical and chemical properties

Appearance	Fine powder
Physical state	Solid.
Form	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.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable
Vapor density	Not applicable
Solubility(ies)	
Solubility (water)	Negligible in water. Partially soluble in toluene and xylene.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable
Decomposition temperature	> 392 °F (> 200 °C)
Viscosity	Not applicable
Other information	
Oxidizing properties	No information available.
Percent volatile	0 % estimated
Softening point	176 - 266 °F (80 - 130 °C)
Specific gravity	1 - 1.2

10. Stability and reactivity

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

11. Toxicological information

Information on likely routes of exposure

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

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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous silica (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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
CF451A			
Aquatic			
Algae	ErC50	Algae	> 100 mg/l, 72 Hours
Crustacea	EC50	Crustacea	> 100 mg/l, 48 Hours
Fish	LC50	Fish	> 100 mg/l, 96 Hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Other adverse effects Not available.

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>.

14. Transport information

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

15. Regulatory information

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

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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

Not listed.

SARA 311/312 Hazardous chemical No

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations Not Listed

Regulatory information 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.

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

Issue date 03-Aug-2018

Version # 01

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

Disclaimer

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Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds