



SAFETY DATA SHEET

1. Identification

Product identifier HP Color LaserJet CF321A-AC Cyan Print Cartridge

Other means of identification

Product Code CF321A-AC

Recommended use This product is a cyan toner preparation that is used in HP Color LaserJet Enterprise Flow MFF M680 series printers.

Recommended restrictions None known.

Company identification Hewlett-Packard Company
3000 Hanover Street
Palo Alto, CA 94304-1185
United States
Telephone 650-857-5020

Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomer.inquiries@hp.com

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) 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.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Styrene acrylate copolymer		Trade Secret	- < 90
Pigment	Pigment	Trade Secret	- < 10
Wax	Wax	Trade Secret	- < 10
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	CO ₂ , water, or dry chemical
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not applicable.
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	Not available.
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 away from strong oxidizers. Store at room temperature.

8. Exposure controls/personal protection

Occupational exposure limits

US. NIOSH: Pocket Guide to Chemical Hazards Components	Type	Value
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Amorphous silica (CAS 7631-86-9)	TWA	6 mg/m ³
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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)

UK WEL: 10 mg/m³ (Respirable Dust), 5 mg/m³ (Inhalable Dust)

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.

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

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

Information on toxicological effects

Acute toxicity

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.

Germ cell mutagenicity Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

Carcinogenicity Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Not classified as toxic according to EU Directive 67/548/EEC and as amended, California Prop. 65, and DFG (Germany).

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Chronic effects No information available.

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.

Components	Species	Test Results
Amorphous silica (CAS 7631-86-9)		
Acute		
<i>Oral</i>		
LD50	Mouse	> 15000 mg/kg
	Rat	> 22500 mg/kg

12. Ecological information

Aquatic toxicity Not available

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

Product	Species	Test Results
CF321A-AC		
Aquatic		
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 This product has not been tested for ecological effects.

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 .
Hazardous waste code	Not regulated.
Waste from residues / unused products	Not available.
Contaminated packaging	Not available.

14. Transport information

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This substance/mixture is not intended to be transported in bulk.
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.
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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 listed.

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
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SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	No
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SARA 313 (TRI reporting)

Not regulated.

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.
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US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

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/NDL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

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

20-Sep-2014

Version #

01

Disclaimer

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Revision Information

1. Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties

Manufacturer information

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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