1. Identification

Product identifier: HP LaserJet CC364A-X-XC-XD Print Cartridge

Other means of identification: Not available.

Recommended use: This product is a toner preparation that is used in HP LaserJet P4014 / P4015 / P4515 series printers.

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.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester resin</td>
<td>Polyester resin</td>
<td>Trade Secret</td>
<td>&lt;55</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>Iron oxide</td>
<td>1317-61-9</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>&lt;2</td>
</tr>
</tbody>
</table>

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 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
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. Store at room temperature. Keep tightly closed and dry. Store away from strong oxidizers.

8. Exposure controls/personal protection
Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica (CAS 7631-86-9)</td>
<td>TWA</td>
<td>6 mg/m3</td>
</tr>
</tbody>
</table>

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.
9. Physical and chemical properties

**Appearance**  Fine powder

**Physical state**  Solid.

**Color**  Black.

**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 available.

**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

**Solubility(ies)**

- **Solubility (water)**  Negligible in water. Partially soluble in toluene and xylene.

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

**Auto-ignition temperature**  No data available

**Decomposition temperature**  > 392 °F (> 200 °C)

**Viscosity**  Not applicable

**Other information**

- **Percent volatile**  Negligible
- **Softening point**  212 - 302 °F (100 - 150 °C)
- **Specific gravity**  1.4 - 1.8
- **VOC (Weight %)**  Not applicable

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

LD50/oral/rat >2000 mg/kg; (OECD 401); Not harmful.

Not classified for acute toxicity according to EU Directive 67/548/EEC and 1999/45/EC.

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

Not available.

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).

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

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica</td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>&gt; 15000 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>&gt; 22500 mg/kg</td>
</tr>
</tbody>
</table>

12. Ecological information

Ecotoxicity

Product

CC364A-X-XC-XD

Aquatic

Fish

LL50

Rainbow Trout

> 1000 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

**DOT**
- Not regulated as dangerous goods.

**IATA**
- **UN number**: UN2807
- **UN proper shipping name**: Magnetized Material
- **Transport hazard class(es)**: -
- **Class**: Not available.
- **Subsidiary risk**: -
- **Packing group**: No.
- **Environmental hazards**: Not applicable.
- **Special precautions for user**: Not available.

**IMDG**
- Not regulated as dangerous goods.

**ADR**
- Not regulated as dangerous goods.

**Further information**
- 22 or more of these cartridges shipped together in a single package (e.g., box, container), by air, are regulated as a magnetized material. These requirements do not apply to single or dual pack cartridges contained in an original HP package and shrink wrapped on a pallet for shipment by air.

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.
    - 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

**SARA 302 Extremely hazardous substance**
- Not listed.

**SARA 311/312 Hazardous chemical**
- No

**Other federal regulations**
- **Safe Drinking Water Act (SDWA)**
  - Not regulated.

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

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

Issue date 16-Apr-2015
Version # 01

Disclaimer
This [Material] Safety Data Sheet is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this (M)SDS 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.

Revision Information
1. Product and Company Identification: Physical States
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Ecological Information: Ecotoxicity
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection

Manufacturer information
Hewlett-Packard Company
11311 Chinden Boulevard
Boise, ID 83714 USA
(Direct) 1-503-494-7199
(Toll-free within the US) 1-800-457-4209

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
1. Identification

Product identifier: HP LaserJet CE390A-X-XC-XD Print Cartridge

Other means of identification: Not available.

Recommended use: This product is a toner preparation that is used in HP LaserJet Enterprise M4555 MFP, 600 M601, 600 M602, 600 M603 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
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<tbody>
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<td>Trade Secret</td>
<td>&lt;55</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>Iron oxide</td>
<td>1317-61-9</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>&lt;3</td>
</tr>
</tbody>
</table>

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 with water. Drink one to two glasses of water. If symptoms occur, consult a physician.

5. Fire-fighting measures

Suitable extinguishing media: CO2, 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.

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. Store at room temperature. Keep tightly closed and dry. Store away from strong oxidizers.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica (CAS 7631-86-9)</td>
<td>TWA</td>
<td>6 mg/m3</td>
</tr>
</tbody>
</table>

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:** Black.
**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 available.
**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
**Solubility(ies)**
- Solubility (water): Negligible in water. Partially soluble in toluene and xylene.
- Partition coefficient (n-octanol/water): Not available.
**Auto-ignition temperature:** No data available
**Decomposition temperature:** >= 392 °F (>= 200 °C)
**Viscosity:** Not applicable
**Other information**
- Percent volatile: Negligible
- Softening point: 212 - 302 °F (100 - 150 °C)
- Softening point: 212 - 302 °F (100 - 150 °C)
**VOC (Weight %)**: Not applicable

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

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).

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.

- 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

<table>
<thead>
<tr>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica (CAS 7631-86-9)</td>
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<tr>
<td>Acute Oral</td>
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<tr>
<td>LD50 Mouse</td>
</tr>
<tr>
<td>LD50 Rat</td>
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12. Ecological information

Ecotoxicity

Product

Species

Test Results

<table>
<thead>
<tr>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE390A-X-XC-XD</td>
</tr>
</tbody>
</table>

Aquatic

Fish

LL50 Fish  > 1000 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

DOT
Not regulated as dangerous goods.

IATA

<table>
<thead>
<tr>
<th>UN number</th>
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<tbody>
<tr>
<td>UN proper shipping name</td>
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<td>Transport hazard class(es)</td>
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<tr>
<td>Class</td>
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<tr>
<td>Subsidiary risk</td>
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<tr>
<td>Packing group</td>
<td>Not applicable.</td>
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<tr>
<td>Environmental hazards</td>
<td>No.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

IMDG
Not regulated as dangerous goods.

ADR
Not regulated as dangerous goods.

Further information
19 or more of these cartridges shipped together in a single package (e.g., box, container), by air, are regulated as a magnetized material. These requirements do not apply to single or dual pack cartridges contained in an original HP package and shrink wrapped on a pallet for shipment by air.

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 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

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

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.
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: 16-Apr-2015

Version #: 01

Disclaimer

This [Material] Safety Data Sheet is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this (M)SDS 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.

Revision Information

Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
Ecological Information: Ecotoxicity

Manufacturer information

Hewlett-Packard Company
11311 Chinden Boulevard
Boise, ID 83714 USA
(Direct) 1-503-494-7199
(Toll-free within the US) 1-800-457-4209

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
1. Identification

Product identifier: HP LaserJet CF281A-X-XC Print Cartridge

Other means of identification: Not available.

Recommended use: This product is a toner preparation that is used in HP LaserJet Enterprise MFP M630 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
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<tbody>
<tr>
<td>Polyester resin</td>
<td>Polyester resin</td>
<td>Trade Secret</td>
<td>&lt;55</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>Iron oxide</td>
<td>1317-61-9</td>
<td>&lt;50</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>&lt;3</td>
</tr>
</tbody>
</table>

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 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
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. Store at room temperature. Keep tightly closed and dry. Store away from strong oxidizers.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica (CAS 7631-86-9)</td>
<td>TWA</td>
</tr>
<tr>
<td></td>
<td>6 mg/m3</td>
</tr>
</tbody>
</table>

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
Not available.

Hand protection
Not available.
9. Physical and chemical properties

**Appearance**
Fine powder

**Physical state**
Solid.

**Color**
Black.

**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 available.

**Flammability (solid, gas)**
Not available.

**Upper/lower flammability or explosive limits**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Vapor pressure**
Not applicable

**Solubility(ies)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility (water)</td>
<td>Negligible in water. Partially soluble in toluene and xylene.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available.</td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td></td>
</tr>
</tbody>
</table>

**Auto-ignition temperature**
No data available

**Decomposition temperature**
> 392 °F (> 200 °C)

**Viscosity**
Not applicable

**Other information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent volatile</td>
<td>Negligible</td>
</tr>
<tr>
<td>Softening point</td>
<td>212 - 302 °F (100 - 150 °C)</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.4 - 1.8</td>
</tr>
</tbody>
</table>

**VOC (Weight %)**
Not applicable

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).
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

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorphous silica (CAS 7631-86-9)</td>
<td>Acute Oral LD50 Mouse &gt; 15000 mg/kg Rat &gt; 22500 mg/kg</td>
</tr>
</tbody>
</table>

12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF281A-X-XC</td>
<td>Aquatic LL50 Fish</td>
<td>&gt; 1000 mg/l, 96 Hours</td>
</tr>
</tbody>
</table>

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

DOT Not regulated as dangerous goods.

IATA UN number UN2807
Magnetized Material

UN proper shipping name
Transport hazard class(es)

Class Not available.

Subsidiary risk -

Packing group Not applicable.

Environmental hazards No.

Special precautions for user Not available.

IMDG
Not regulated as dangerous goods.

ADR
Not regulated as dangerous goods.

Further information
19 or more of these cartridges shipped together in a single package (e.g., box, container), by air, are regulated as a magnetized material. These requirements do not apply to single or dual pack cartridges contained in an original HP package and shrink wrapped on a pallet for shipment by air.

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 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

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312
Hazardous chemical
No

Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

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/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.
16. Other information, including date of preparation or last revision

Issue date 30-Sep-2014
Revision date 16-Apr-2015
Version # 02

Disclaimer
This [Material] Safety Data Sheet is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this (M)SDS 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.

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Boise, ID 83714 USA
(Direct) 1-503-494-7199
(Toll-free within the US) 1-800-457-4209

Explanation of abbreviations

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