SAFETY DATA SHEET

1. Identification

Product identifier: HP Color LaserJet CF452A Yellow Print Cartridge

Other means of identification: None.

Recommended use: This product is a yellow 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

HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States

Telephone: 650-857-5020

HP Inc. health effects line (Toll-free within the US) 1-800-457-4209
(Toll-free within the US) 1-800-474-6836
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
(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): 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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene acrylate copolymer</td>
<td>Trade Secret</td>
<td>&lt;85</td>
<td></td>
</tr>
<tr>
<td>Wax</td>
<td>Trade Secret</td>
<td>&lt;10</td>
<td></td>
</tr>
<tr>
<td>Pigment</td>
<td>Trade Secret</td>
<td>&lt;5</td>
<td></td>
</tr>
</tbody>
</table>

Material name: CF452A

14222  Version #: 01  Issue date: 03-Aug-2018
### 4. First-aid measures

<table>
<thead>
<tr>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Move person to fresh air immediately. If irritation persists, consult a physician.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>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.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Rinse mouth out with water. Drink one to two glasses of water. If symptoms occur, consult a physician.</td>
</tr>
</tbody>
</table>

Most important symptoms/effects, acute and delayed: Not available.

### 5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>CO2, water, or dry chemical</th>
</tr>
</thead>
</table>

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.

None established.

### 6. Accidental release measures

<table>
<thead>
<tr>
<th>Personal precautions, protective equipment and emergency procedures</th>
<th>Minimize dust generation and accumulation.</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Precautions for safe handling</th>
<th>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.</th>
</tr>
</thead>
</table>

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

<table>
<thead>
<tr>
<th>Occupational exposure limits</th>
<th>This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological limit values</td>
<td>No biological exposure limits noted for the ingredient(s).</td>
</tr>
</tbody>
</table>

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: Not available.
- Hand protection: Not available.
- Other: Not available.
9. Physical and chemical properties

**Appearance**
Fine powder

**Physical state**
Solid.

**Form**
solid

**Color**
Yellow

**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

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF452A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>ErC50</td>
<td>Algae, &gt; 100 mg/l, 72 Hours</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Crustacea, &gt; 100 mg/l, 48 Hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish, &gt; 100 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

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**  
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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This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.
**Explanation of abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</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>