1. Identification

Product identifier: HP Color LaserJet CF452A Yellow Print Cartridge

Other means of identification: Not available.

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.

Company identification: 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
(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

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>Wax</td>
<td>Trade Secret</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Pigment</td>
<td>Pigment</td>
<td>Trade Secret</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt;1</td>
<td></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 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
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 at room temperature. 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>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>PEL</td>
<td>15 mg/m3</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide (CAS 13463-67-7)</td>
<td>TWA</td>
<td>10 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**
- 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

**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**
- **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
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
Based on available data, the classification criteria are not met.

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)

Carcinogenicity
Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity
Titanium dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

Reproductive toxicity
Based on available data, the classification criteria are not met.

Specific target organ toxicity
Based on available data, the classification criteria are not met.

- single exposure

Specific target organ toxicity
Based on available data, the classification criteria are not met.

- repeated exposure

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

<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></td>
<td><strong>Aquatic</strong></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>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td></td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna) &gt; 1000 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Mummichog (Fundulus heteroclitus) &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
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 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
Titanium dioxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act
Titanium dioxide (CAS 13463-67-7)

US. Pennsylvania Worker and Community Right-to-Know Law
Titanium dioxide (CAS 13463-67-7)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
TITANIUM DIOXIDE (AIRBORNE, UNBOUND PARTICLES OF RESPIRABLE SIZE) (CAS 13463-67-7) Listed: September 2, 2011

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
24-Mar-2017
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.

Manufacturer information

HP Inc.
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