



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Identification of the preparation** HP Color LaserJet C4194A Yellow Print Cartridge

**Use of the Substance/Preparation** This product is a yellow toner preparation that is used in HP Color LaserJet 4500/4550 series printers.

**Version #** 06

**Revision date** 21-Apr-2011

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## 2. HAZARDS IDENTIFICATION

### Acute health effects

**Skin contact** Unlikely to cause skin irritation.

**Eye contact** May cause transient slight irritation.

**Inhalation** Minimal respiratory tract irritation may occur with exposure to large amounts of toner dust.

**Ingestion** Low acute toxicity. Ingestion is a minor route of entry for intended use of this product.

### Potential health effects

**Routes of exposure** Potential routes of exposure under normal use conditions are skin, eye contact and inhalation.

Ingestion is not expected to be a primary route of exposure for this product under normal use conditions.

**Chronic health effects** Prolonged inhalation of excessive amounts of any dust may cause lung damage. Use of this product as intended does not result in inhalation of excessive amounts of dust.

**Carcinogenicity** Titanium dioxide is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). The IARC classification was based on high concentrations of titanium dioxide particles in animal lungs. Under intended use of this toner product, exposure to titanium dioxide is much lower.

**Other information** This product is not classified as hazardous according to OSHA CFR 1910.1200 or EU Directive 1999/45/EC, as amended.

This preparation contains no component classified as Persistent, Bioaccumulative, and Toxic (PBT) or very Persistent and very Bioaccumulative (vPvB) as defined under Regulation (EC) 1907/2006.

**Classification** Not classified.

**Physical hazards** Not classified as a physical hazard.

**Health hazards** Not classified as a health hazard.

**Environmental hazards** Not classified as an environmental hazard.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Styrene acrylate copolymer	Trade secret	< 80		
Wax	Trade secret	< 15		
Pigment	Trade secret	< 10		
polyester	Trade secret	< 10		

#### 4. FIRST AID MEASURES

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

#### 5. FIRE-FIGHTING MEASURES

<b>Fire fighting equipment/instructions</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Suitable extinguishing media</b>	CO <sub>2</sub> , water, or dry chemical
<b>Extinguishing media which must not be used for safety reasons</b>	None known.
<b>Unusual fire &amp; explosion hazards</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>Specific methods</b>	None established.
<b>Hazardous combustion products</b>	Carbon monoxide and carbon dioxide.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Minimise dust generation and accumulation.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.
<b>Other information</b>	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.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	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.
<b>Storage</b>	Keep out of the reach of children. Store at room temperature. Store away from strong oxidizers. Keep tightly closed and dry.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Exposure limit values

##### United Kingdom

##### Components

	Type	Value	Form
Titanium dioxide (13463-67-7)	TWA	4.0000 mg/m <sup>3</sup>	Respirable.
		10.0000 mg/m <sup>3</sup>	Inhalable

<b>Additional exposure data</b>	USA OSHA (TWA/PEL): 15 mg/m <sup>3</sup> (Total Dust), 5 mg/m <sup>3</sup> (Respirable Fraction) ACGIH (TWA/TLV): 10 mg/m <sup>3</sup> (Inhalable Particulate), 3 mg/m <sup>3</sup> (Respirable Particulate) TRGS 900 (Luftgrenzwert) - 10 mg/m <sup>3</sup> (Einatembare partikel), 3 mg/m <sup>3</sup> (Alveolengängige fraktion) UK WEL: 10 mg/m <sup>3</sup> (Respirable Dust), 5 mg/m <sup>3</sup> (Inhalable Dust)
<b>Exposure controls</b>	Use in a well ventilated area.
<b>Occupational exposure controls</b>	
<b>General</b>	No personal respiratory protective equipment required under normal conditions of use.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Fine powder
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<b>Physical state</b>	Solid
<b>Form</b>	solid
<b>Color</b>	Yellow
<b>Odor</b>	Slight plastic odor
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not flammable
<b>Vapor pressure</b>	Not applicable
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Negligible in water. Partially soluble in toluene and xylene.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Viscosity</b>	Not applicable
<b>Vapor density</b>	Not available.
<b>Evaporation rate</b>	Not applicable
<b>Melting point</b>	No information available.
<b>Freezing point</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable
<b>Specific gravity</b>	1 - 1.2 (H <sub>2</sub> O = 1)
<b>Softening point</b>	100 - 150 °C (212 - 302 °F)
<b>Percent volatile</b>	0 % estimated
<b>VOC</b>	Not available.
<b>Other information</b>	Decomposition temperature: > 200 ° C

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## 10. STABILITY AND REACTIVITY

<b>Hazardous decomposition products</b>	Carbon monoxide and carbon dioxide.
<b>Stability</b>	Stable under normal storage conditions.
<b>Materials to avoid</b>	Strong oxidizers
<b>Hazardous polymerization</b>	Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

<b>Oral toxicity</b>	LD50/oral/rat >2000mg/kg; Not harmful. (OECD 401). Not classified for acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.
<b>Carcinogenicity</b>	Titanium dioxide is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). The IARC classification was based on high concentrations of titanium dioxide particles in animal lungs. Under intended use of this toner product, exposure to titanium dioxide is much lower.  None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.
<b>Inhalation toxicity</b>	LC50: inh/rat 5 mg/l/4 hrs., (OECD 403).  Not classified for acute inhalation toxicity according to EU Directive 67/548/EEC and 1999/45/EC.
<b>Serious eye damage/eye irritation</b>	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.
<b>Skin sensitization</b>	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.
<b>Chronic toxicity</b>	No information available.
<b>Sensitization</b>	Not classified as a sensitizer according to EU Directive 67/548/EEC and as amended, and OSHA HCS (US).
<b>Mutagenicity</b>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

<b>Reproductivity</b>	Not classified as toxic according to EU Directive 67/548/EEC and as amended, California Prop. 65, and DFG (Germany).
<b>Further information</b>	Complete toxicity data are not available for this specific formulation Refer to Section 2 for potential health effects and Section 4 for first aide measures.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** LL50: > 1000 mg/l, Fish, 96.00 Hours

## 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

### Labeling

**Contains** Pigment, polyester, Styrene acrylate copolymer, Titanium dioxide, Wax

**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

**Other information** This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC.

**Disclaimer** This Safety Data Sheet document 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 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.

**Issue date** 21-Apr-2011

**This data sheet contains changes from the previous version in section(s):**  
 HAZARDS IDENTIFICATION: Carcinogenicity  
 PHYSICAL AND CHEMICAL PROPERTIES: Color  
 TOXICOLOGICAL INFORMATION: Carcinogenicity  
 TOXICOLOGICAL INFORMATION: Further information  
 TRANSPORT INFORMATION: Further information

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## Explanation of abbreviations

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