



# Material Safety Data Sheet

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	<b>CE312A</b>
<b>Product use</b>	This product is a yellow toner preparation that is used in HP Color LaserJet Pro CP1025 and HP LaserJet Pro 100 Color MFP, HP LaserJet Pro 200 Color MFP series printers.
<b>Company identification</b>	7 Goban-cho Chiyoda-ku Tokyo 102-0076 Japan Telephone (+81) 3 5463-6600  Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com Poison Information Centre telephone number 0120-50-3024

## 2. HAZARDS IDENTIFICATION

<b>Acute health effects</b>	
<b>Skin contact</b>	Unlikely to cause skin irritation.
<b>Eye contact</b>	May cause transient slight irritation.
<b>Inhalation</b>	Minimal respiratory tract irritation may occur with exposure to large amounts of toner dust. Use of this product as intended does not result in inhalation of excessive amounts of dust.
<b>Ingestion</b>	Low acute toxicity. Ingestion is a minor route of entry for intended use of this product.
<b>Potential health effects</b>	
<b>Routes of exposure</b>	Potential routes of exposure under normal use conditions are skin and eye contact; and inhalation  Ingestion is not expected to be a primary route of exposure for this product under normal use conditions.
<b>Chronic health effects</b>	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.
<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.
<b>Other information</b>	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.
<b>Classification</b>	Not classified.
<b>Physical hazards</b>	Not classified as a physical hazard.
<b>Health hazards</b>	Not classified as a health hazard.
<b>Environmental hazards</b>	Not classified as an environmental hazard.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent
Styrene acrylate copolymer	Trade secret	< 85
Wax	Trade secret	< 10
Pigment	Trade secret	< 5
Amorphous silica	7631-86-9	< 3
Titanium dioxide	13463-67-7	< 1

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## 4. FIRST AID MEASURES

<b>In case of 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.

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## 5. FIRE-FIGHTING MEASURES

<b>Flash point</b>	Not applicable
<b>Extinguishing media</b>	CO2, water, or dry chemical
<b>Extinguishing media to avoid</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>Special fire fighting procedures</b>	None established.
<b>Protection of fire-fighters</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Hazardous combustion products</b>	Carbon monoxide and carbon dioxide.

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## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency measures</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>Clean-up methods and materials and containment measures</b>	Not available.
<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.

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## 7. HANDLING AND STORAGE

### Handling

<b>Technical measures</b>	Not available.
<b>Local and general ventilation</b>	Not available.
<b>Precautions</b>	Not available.
<b>Safe handling advice</b>	Not available.

### Storage

<b>Technical measures</b>	Not available.
<b>Suitable storage conditions</b>	Not available.
<b>Safe packaging materials</b>	Not available.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Occupational exposure limits

#### Japan OELs - JSOH

Components	Type	Value	Form
Titanium dioxide (13463-67-7)	TWA	4.0000 mg/m3	Total dust.
		1.0000 mg/m3	Respirable dust.

#### ACGIH

Components	Type	Value
Titanium dioxide (13463-67-7)	TWA	10.0000 mg/m3

<b>Additional exposure data</b>	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)/%SiO <sub>2</sub> , ACGIH (TWA/TLV): 10 mg/m3
<b>Engineering measures</b>	Use in a well ventilated area.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	Not available.
<b>Hand protection</b>	Not available.
<b>Eye protection</b>	Not available.
<b>Skin and body protection</b>	Not available.
<b>General</b>	No personal respiratory protective equipment required under normal conditions of use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

<b>Physical state</b>	Solid
<b>Form</b>	solid
<b>Color</b>	Yellow
<b>Odor</b>	Slight plastic odor
<b>pH</b>	Not applicable
<b>Melting point/Freezing point</b>	Not available.
<b>Boiling point, initial boiling point, and boiling range</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Auto-ignition temperature</b>	Not applicable
<b>Flammability limit - lower (%)</b>	Not flammable
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not available.
<b>Evaporation rate</b>	Not applicable
<b>Specific gravity</b>	1 - 1.2 (H <sub>2</sub> O = 1)
<b>Solubility</b>	Negligible in water. Partially soluble in toluene and xylene.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable
<b>Softening point</b>	80 - 130 °C (176 - 266 °F)
<b>Other data</b>	
<b>Kinematic viscosity</b>	Not available.
<b>Kinematic viscosity temp</b>	Not available.
<b>Percent volatile</b>	0 % estimated
<b>Other information</b>	Decomposition temperature: > 200 °C

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Imaging Drum: Exposure to light
<b>Incompatible materials</b>	Strong oxidizers
<b>Hazardous decomposition products</b>	Carbon monoxide and carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

<b>Oral toxicity</b>	LD50/oral/rat >2000mg/kg; (OECD 401); Not harmful.. Not classified for acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.
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## 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.

None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

## ACGIH Carcinogens

Titanium dioxide (CAS 13463-67-7)

A4 Not classifiable as a human carcinogen.

## IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous silica (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.

Titanium dioxide (CAS 13463-67-7)

2B Possibly carcinogenic to humans.

## IARC Monographs: Evidence of carcinogenicity in humans

Titanium dioxide (CAS 13463-67-7)

Inadequate data.

## Inhalation toxicity

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

## Chronic toxicity

No information available.

## Sensitization

Not classified as a sensitizer according to EU Directive 67/548/EEC and as amended, and OSHA HCS (US).

## Mutagenicity

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

## Reproductivity

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

## 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

## Ecotoxicological data

### Product

### Test Results

HP Color LaserJet CE312A Yellow Print Cartridge

LC50 Fish: > 100 mg/l 96.00 Hours

### Components

### Test Results

Titanium dioxide (13463-67-7)

EC50 Water flea (Daphnia magna): > 1000 mg/l 48.00 hours

LC50 Mummichog (Fundulus heteroclitus): > 1000 mg/l 96.00 hours

## Ecotoxicity

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

## Other hazardous effects

This product has not been tested for ecological effects.

# 13. DISPOSAL CONSIDERATIONS

## Local disposal regulations

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

## Industrial Safety and Health Law

### Substances subject to notification

Not regulated.

## Poisonous and Deleterious Substances Control Law

### Deleterious substances

Not regulated.

### Poisonous substances

Not regulated.

### Specified poisonous substances

Not regulated.

**PRTR and Promotion of Chemical Management Law, old regulated substances (Cabinet Order No. 328, 2004)**

**Specified class 1 substances (substance name and PRTR no.)**

Not regulated.

**Class 1 substances (substance name and PRTR no.)**

Not regulated.

**Class 2 substances (substance name and PRTR no.)**

Not regulated.

**PRTR and Promotion of Chemical Management Law, new regulated substances (Cabinet Order No. 356, 2008)**

**Specified class 1 substances (substance name and PRTR no.)**

Not regulated.

**Class 1 substances (substance name and PRTR no.)**

Not regulated.

**Class 2 substances (substance name and PRTR no.)**

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.

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**16. OTHER INFORMATION**

**Other information**

This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

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**Version number**

03

**This data sheet contains changes from the previous version in section(s):**

Product and Company Identification: Alternate Trade Names  
CHEMICAL PRODUCT AND COMPANY IDENTIFICATION: Product use

**Issue date**

31-Oct-2011

**Revision date**

31-Oct-2011

**Manufacturer 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