



# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Identification of the preparation** HP LaserJet Q5945A Print Cartridge

**Use of the preparation** This product is a toner preparation that is used in HP LaserJet 4345mfp series multifunction products.

**Manufacturer information** Hewlett-Packard Company  
11311 Chinden Boulevard  
Boise, ID 83714 USA

**Hewlett-Packard health effects line**

**(Toll-free within the US)** 1-800-457-4209  
**(Direct)** 1-503-494-7199

**General information telephone number**

**HP Customer Care Line** 1-800-474-6836  
**(Toll-free)** 1-800-474-6836  
**(Direct)** 1-208-323-2551

**Date prepared** Oct 12, 2005

**MSDS number** 86070

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight
Polyester resin	Trade Secret	40 - 50
Iron oxide	1317-61-9	40 - 50
Amorphous silica	7631-86-9	1 - 2

## 3. 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 and 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** None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.

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

## 4. FIRST AID MEASURES

### First aid procedures

**Skin** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.



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<b>Eye</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>Inhalation</b>	Move person to fresh air immediately. If irritation persists, consult a physician.
<b>Ingestion</b>	Rinse mouth 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 and method</b>	Not applicable
<b>Auto ignition temperature</b>	No data available
<b>Hazardous combustion products</b>	Carbon monoxide and carbon dioxide.
<b>Extinguishing media</b>	CO <sub>2</sub> , water, or dry chemical
<b>Unsuitable extinguishing media</b>	None known.
<b>Unusual fire and explosion hazard</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>Fire fighting equipment/instructions</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Special firefighting procedures</b>	None established.

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## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Minimize dust generation and accumulation. Avoid breathing dust.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.
<b>Procedures if material is released or spilled</b>	Slowly vacuum or sweep the material into a bag or other sealed container. If a vacuum is used, the motor must be rated as dust explosion-proof. Clean remainder with a damp cloth or vacuum cleaner. 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

<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 in the original container. Keep the container tightly closed and dry. Store away from strong oxidizers.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure limit values</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) Amorphous silica: USA OSHA (TWA/PEL): 20 mppcf 80 (mg/m <sup>3</sup> )/%SiO <sub>2</sub> , ACGIH (TWA/TLV): 10 mg/m <sup>3</sup>
<b>Personal protective equipment</b>	
<b>General</b>	No personal respiratory protective equipment required under normal conditions of use.
<b>Exposure guidelines</b>	Use in a well ventilated area.

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## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>pH</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Boiling point</b>	Not applicable



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<b>Melting point</b>	100 - 150 °C (212.0 - 302.0 °F) (Softening point)
<b>Softening point</b>	100 - 150 °C (212.0 - 302.0 °F)
<b>Solubility</b>	Negligible in water. Partially soluble in toluene and xylene.
<b>Specific gravity</b>	1.4 - 1.8 (H <sub>2</sub> O = 1)
<b>Flash point</b>	Not applicable
<b>Viscosity</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Flammability</b>	Not flammable
<b>Appearance</b>	Fine powder
<b>Form</b>	solid
<b>Odor</b>	Slight plastic odor
<b>Oxidizing properties</b>	No information available.
<b>Other information</b>	Decomposition temperature: > 200 degrees C
<b>Color</b>	Black

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## 10. CHEMICAL STABILITY & REACTIVITY INFORMATION

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

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## 11. TOXICOLOGICAL INFORMATION

Complete toxicity data are not available for this specific formulation  
Refer to Section 3 for potential health effects and Section 4 for first aid measures.

<b>Dermal irritation</b>	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.
<b>Eye irritation</b>	Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.
<b>Sensitization</b>	Not classified as a sensitizer according to EU Directive 67/548/EEC and as amended, and OSHA HCS (US).
<b>Chronic toxicity</b>	No information available.
<b>Oral toxicity</b>	LD50/oral/rat >2000 mg/kg , Not harmful. (OECD 401)
<b>Carcinogenicity</b>	Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).
<b>Mutagenicity</b>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)
<b>Reproductive toxicity</b>	Not classified as toxic according to EU Directive 67/548/EEC and as amended, California Prop. 65, and DFG (Germany).

### Symptoms and target organs

NIOSH - Pocket Guide - Target Organs  
Amorphous silica                      7631-86-9                      respiratory system, eyes



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## 12. ECOLOGICAL INFORMATION

**Other information** This product has not been tested for ecological effects.

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## 13. DISPOSAL CONSIDERATIONS

**Disposal instructions** Do not shred print 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>.

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## 14. TRANSPORTATION INFORMATION

**General** Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

### IATA

<b>Proper shipping name</b>	Not applicable
<b>Special precautions</b>	None
<b>Packaging exceptions</b>	None
<b>Identification number (UN)</b>	None
<b>Packing group</b>	N/A

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## 15. REGULATORY INFORMATION

**International 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.

**US federal regulations** US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

US TSCA 12(b): Contains p-Xylene (CAS No. 106-42-3), subject to export notification requirements.

**State regulations** This product contains no chemical substances subject to rules or orders under California Proposition 65.

**HMIS ratings**

Health:	1
Flammability:	1
Physical hazard:	0

**NFPA ratings**

Health:	1
Flammability:	1
Instability:	0

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

**Hazard categories**

- Immediate Hazard - No
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No

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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).

**Issue date** Oct 12 2005 1:04PM

**Revision** 2

**Replaces sheet dated** Apr 19 2005 12:58PM

**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.

**MSDS sections updated** 1. Chemical Product and Company Identification: Identification of the preparation  
1. Chemical Product and Company Identification: Use of the preparation

### 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