MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Material name: HP LaserJet Q5949A-X-XC-XD Print Cartridge

Use of the preparation: This product is a toner preparation that is used in HP LaserJet 1160/1320/3390 series printers.

Version #: 09

Revision date: 15-Dec-2007

Product code(s): Q5949A-X-XC-XD

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: Dec 15, 2007

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

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, as amended.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component/substance</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene acrylate copolymer</td>
<td>Trade Secret</td>
<td>45 - 55</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1317-61-9</td>
<td>40 - 50</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>1 - 2</td>
</tr>
</tbody>
</table>
4. First Aid Measures

First aid procedures

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.

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

Inhalation
Move person to fresh air immediately. 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.

5. Fire Fighting Measures

Flash point and method
Not applicable

Hazardous combustion products
Carbon monoxide and carbon dioxide.

Flammable properties
Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.

Extinguishing media

Suitable extinguishing media
CO2, water, or dry chemical

Unsuitable extinguishing media
None known.

Unusual fire and explosion hazard
Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.

Protection of firefighters
If fire occurs in the printer, treat as an electrical fire.

Special firefighting procedures
None established.

6. Accidental Release Measures

Personal precautions
Minimize dust generation and accumulation.

Environmental precautions
Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.

Other information
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

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.

Storage
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.
8. Exposure Controls/Personal Protection

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)

Personal protective equipment
- General: No personal respiratory protective equipment required under normal conditions of use.

9. Physical & Chemical Properties

Appearance: Fine powder
Color: Black
Odor: Slight plastic odor
Odor threshold: Not available
Physical state: Not available
Form: solid
pH: Not applicable
Melting point: Not available
Freezing point: Not available
Boiling point: Not applicable
Flash point: Not applicable
Evaporation rate: Not applicable
Flammability: Not available
Flammability limits in air, upper, % by volume: Not available
Flammability limits in air, lower, % by volume: Not flammable
Vapor pressure: Not applicable
Vapor density: Not applicable
Specific gravity: 1.4 - 1.8 (H₂O = 1)
Relative density: Not available
Solubility in water: Negligible in water. Partially soluble in toluene and xylene.
Partition coefficient (n-octanol/water): Not available
Auto-ignition temperature: Not applicable
Decomposition temperature: Not available
Softening point: 212 - 302 °F (100 - 150 °C)
Viscosity: Not applicable

10. Chemical Stability & Reactivity Information

Chemical stability: Stable under normal storage conditions.
Conditions to avoid: Imaging Drum: Exposure to light
11. Toxicological Information

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

**Eye irritation**
Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.

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

**Chronic toxicity**
No information available.

**Carcinogenicity**
Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).

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

**Reproductive toxicity**
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

12. Ecological Information

**Persistence and degradability**
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. Transportation Information

**Department of Transportation (DOT) Requirements**
Not regulated as dangerous goods.

**IATA**
Not regulated as dangerous goods.

15. Regulatory Information

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

**CERCLA (Superfund) reportable quantity**
None
**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

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

**Section 302 extremely hazardous substance**

**No**

**Section 311 hazardous chemical**

**No**

**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.

**State regulations**

- **U.S. - Pennsylvania - RTK (Right to Know) List**
  - **Amorphous silica 7631-86-9 Present**
- **U.S. - New Jersey - Right to Know Hazardous Substance List**
  - **Amorphous silica 7631-86-9 sn 1655**

**16. Other Information**

- **HMIS® ratings**
  - **Health: 1**
  - **Flammability: 1**
  - **Physical hazard: 0**

- **NFPA ratings**
  - **Health: 1**
  - **Flammability: 1**
  - **Instability: 0**

- **Issue date**
  - **Dec 15 2007 9:14AM**

- **Revision**
  - **9**

- **Replaces sheet dated**
  - **Oct 2 2007 9:04PM**

**Disclaimer**

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**MSDS sections updated**

15. Regulatory Information: US federal regulations
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