Material Safety Data Sheet

1.0 Product and Company Identification

Identification of the Preparation

| HP Color LaserJet Black Print Cartridge C4191A |

Company Identification

Hewlett-Packard Company
11311 Chinden Boulevard
Boise, Idaho 83714
United States

Emergency Telephone Number Hewlett-Packard Health Effects Line

1-800-457-4209 (USA and Canada)
503-494-7199 (USA direct)
Singapore: +001-800-332-13321

General Information Telephone Number

208-323-2551 (USA direct)

Local Contact Information

Ireland
Liffey Park Technology Park
Barnhall Road Leixlip, Co.
Kildare, Ireland
Phone: 01 6150000

United Kingdom
Hewlett-Packard, Ltd.
Cain Road, Amen Corner
Bracknell, Berkshire, RG12 1HN
Phone: 1344 36-0000

<table>
<thead>
<tr>
<th>Hazard Rating</th>
<th>US NFPA/HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Instability/Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Special</td>
<td>N/A</td>
</tr>
</tbody>
</table>

2.0 Composition/Information on Ingredients

This product is a black toner preparation that is used in Hewlett-Packard Color LaserJet 4500 and 4550 series printers.

<table>
<thead>
<tr>
<th>Component/Substance</th>
<th>CAS Number</th>
<th>EU Number</th>
<th>% by Weight</th>
<th>Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene Acrylate Copolymer</td>
<td>-</td>
<td>-</td>
<td>40 - 50</td>
<td>-</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>1317-61-9</td>
<td>215-277-5</td>
<td>40 - 50</td>
<td>-</td>
</tr>
</tbody>
</table>

3.0 Hazard Identification

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

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3.1 Routes of Exposure
Inhalation, ingestion, skin and eyes.

3.2 Acute Health Hazards

Inhalation: Minimal respiratory tract irritation may occur with exposure to large amount of toner dust.

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

Skin: Unlikely to cause skin irritation.

Eyes: May cause transient slight irritation.

3.3 Chronic Health Hazards
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.

3.4 Carcinogenicity
Refer to section 11.

4.0 First Aid Measures

Inhalation: Move person to fresh air immediately. If symptoms occur, consult a physician.

Ingestion: Rinse mouth with water. Drink one to two glasses of water. If symptoms occur, consult a physician.

Skin: Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.

Eyes: Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. If irritation persists, consult a physician.

5.0 Fire Fighting Measures

Extinguishing media
CO₂, water, dry chemical

Unsuitable Extinguishing Media
None known

Special Firefighting Procedures
None

Unusual fire and explosion hazards
Toner material, like most organic material in powder form, is capable of creating a dust explosion.

Auto-ignition temperature
No data available

Flashpoint (method)
Not applicable

Hazardous Combustion Products
Carbon monoxide, carbon dioxide, smoke.
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6.0 Accidental release measures

6.1 Spill or leak procedures
Avoid breathing dust. Minimize the release of particles. Slowly 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 waste toner in accordance with local requirements.

6.2 Environmental precautions
Do not discharge into drains (See also section 13 Disposal Considerations).

7.0 Handling and Storage

Advice on safe handling and protection against fire
Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.

Requirements for storage rooms and advice on storage compatibility
Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.

8.0 Exposure control/ personal protection

8.1 Exposure Limit Values
- 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)
- TRGS 900 (Luftgrenzwert): 10 mg/m³ (Einatembare Partikel) 3 mg/m³ (Alveolengängige Fraktion)

8.2 Exposure Controls
- Respiratory protection: Not required under intended use
- Ventilation: Good general ventilation should be sufficient under intended use
- Protective gloves: Not required under intended use
- Eye protection: Not required under intended use
- Other protective equipment: Not required under intended use

9.0 Physical and chemical properties

- pH: Not applicable
- Boiling point: Not applicable
- Flash point: Not applicable
- Melting point: 100 - 150°C (Softening Point)
- Flammability: Non-flammable solid (according to test methods of USA 16 CFR 1500.44 and 84/449/EEC and as amended (Annex V) A.10)

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Explosive properties: Toner material, like most organic material in powder form, is capable of creating a dust explosion.

Oxidizing properties: No data available.

Vapor Pressure: Not applicable.

Specific gravity (H₂O=1): 1.4 - 1.8.

Solubility in water: Negligible.

Solubility in organic solvents: Partially soluble in toluene and xylene.

Partition coefficient: Not applicable.

Viscosity: Not applicable.

Vapor density: Not applicable.

Evaporation rate: Not applicable.

Physical state: Fine powder.

Color: Black.

Odor: Slight plastic odor.

Other: None Known.

10.0 Stability and reactivity

Stability: Stable under normal storage conditions.

Incompatibilities: Strong oxidizers.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, smoke.

Hazardous polymerization: Will not occur.

11.0 Toxicological information

Refer to Section 3 for potential health effects and Section 4 for first aid measures.

Acute Toxicity:

Inhalation: LC₅₀: inh-rat>5mg/L/4 hrs. (data from similar toner), not harmful.

Ingestion: LD₅₀: orl-rat>2000 mg/kg (data from ingredients of toner).

Eye Contact: Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended (data from ingredients of toner).

Skin Contact: Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended (data from ingredients of toner).

Chronic Toxicity: No data available.


Mutagenicity: Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium).
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Carcinogenicity: Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California)

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

Other: Sub-Acute Toxicity (Rat) - 90 day inhalation test, No Observable Effect Level (NOEL): 16 mg/m 3.
Expected air concentration levels under printing conditions are <0.01mg/m3.

12.0 Ecological Information

No data available for ecological and wastewater treatment (sewage) systems. Avoid spills and dispose of in accordance with applicable laws and regulations.

13.0 Disposal considerations

Do not put toner or print cartridge into fire; heated toner may cause severe burns. 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.

14.0 Transportation information

Not a regulated article under DOT, IATA, ADR, or RID

UN Number None
Class None
Proper Shipping Name None
Packing Group None
Special Precautions Not identified

15.0 Regulatory information

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

US EPA TSCA 12(b) Contains p-Xylene - [CAS No. 106-42-3]
US California Proposition 65 None
EU Notification All components in this product are compliant with EU Chemical Inventory regulations.
EU R&S Phrase Information No European Risk Phrases (labeling data)
Dangerous Components None
(CAS No.) wt% USA Labeling
Symbol Not required
Hazard Warning Not required
Safety Advice Not required
Hazardous Component(s) None

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16.0 Other information

Date Prepared: July 1, 2004
HP-DMS Document Control
Number: This document replaces all prior versions of the MSDS
Revision Information: This MSDS was prepared in compliance with EU Directive
EU Information 91/155/EEC as amended by 2001/58/EC and USA OSHA

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suitability for a particular application.