Material Safety Data Sheet

1.0 Product and Company Identification

Identification of the Preparation
HP LaserJet Cartridge C4182X

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 toner preparation that is used in Hewlett-Packard LaserJet 8100, Mopier 320, 8150 series, or 8150MFP 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

The preparation is not classified according to EU Directive 1999/45/EC

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

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

Ingestion: Ingestion is not applicable route of entry for intended use.

Skin: Unlikely to cause skin irritation.

Eyes: May cause eye 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 symptoms occur, consult a physician.

Eyes: Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes. If symptoms occur, 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
Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
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## 6.0 Accidental release measures

### 6.1 Spill or leak procedures
Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. If a vacuum is used, the motor must be rated as dust tight. 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

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advising on safe handling and protection against fire</td>
<td>Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.</td>
</tr>
<tr>
<td>Requirements for storage rooms and advise on storage compatibility</td>
<td>Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.</td>
</tr>
</tbody>
</table>

## 8.0 Exposure control/ personal protection

### 8.1 Exposure Limit Values

<table>
<thead>
<tr>
<th>Standard</th>
<th>Limit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA OSHA (TWA/PEL)</td>
<td>15 mg/m³ (Total Dust)</td>
</tr>
<tr>
<td></td>
<td>5 mg/m³ (Respirable Fraction)</td>
</tr>
<tr>
<td>ACGIH (TWA/TLV)</td>
<td>10 mg/m³ (Inhalable Particulate)</td>
</tr>
<tr>
<td></td>
<td>3 mg/m³ (Respirable Particulate)</td>
</tr>
<tr>
<td>TRGS 900 (Luftgrenzwert)</td>
<td>10 mg/m³ (Einatembare Partikel)</td>
</tr>
<tr>
<td></td>
<td>3 mg/m³ (Alveolengängige Fraktion)</td>
</tr>
</tbody>
</table>

### 8.2 Exposure Controls

<table>
<thead>
<tr>
<th>Control</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>Not required under intended use.</td>
</tr>
<tr>
<td>Ventilation</td>
<td>Good general ventilation should be sufficient under intended use.</td>
</tr>
<tr>
<td>Protective gloves</td>
<td>Not required under intended use.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Not required under intended use.</td>
</tr>
<tr>
<td>Other protective equipment</td>
<td>Not required under intended use.</td>
</tr>
</tbody>
</table>

## 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 (Annex V)
- **Explosive properties**: Toner material, like most organic material in powder form, is capable of creating a dust explosion.
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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: Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
Hazardous polymerization: Will not occur

11.0 Toxicological information

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

Inhalation: LC₅₀ inh-rat >5mg/L/4 hrs. (data from similar toner), not harmful.
Ingestion: LD₅₀ orl-rat>2000 mg/kg, not harmful.
Eye Contact: Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC.
Skin Contact: Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC.

Chronic Toxicity: No data available.
Mutagenicity: Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)
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, California Prop. 65, or DFG (Germany).
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Other: Sub-Acute Toxicity (Rat) - 90 day inhalation test, sample mean volume diameter 6.0 mm, No Observable Effect Level (NOEL): 16mg/m³. 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.

13.0 Disposal considerations

Product / unused product / contaminated packaging (for Germany only)
Recommendation: consultation with the disposal agency and the relevant authorities; cleansing agent is water.

14.0 Transportation information

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

<table>
<thead>
<tr>
<th>UN Number</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>None</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>None</td>
</tr>
<tr>
<td>Packing Group</td>
<td>None</td>
</tr>
<tr>
<td>Special Precautions</td>
<td>None</td>
</tr>
</tbody>
</table>

15.0 Regulatory information

<table>
<thead>
<tr>
<th>US EPA TSCA Inventory</th>
<th>All ingredients are listed on TSCA inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>US EPA TSCA 12(b)</td>
<td>None</td>
</tr>
<tr>
<td>US California Proposition 65</td>
<td>None</td>
</tr>
<tr>
<td>EU Notification</td>
<td>All components in this product are compliant with EU Chemical Inventory regulations.</td>
</tr>
<tr>
<td>EU R&amp;S Phrase Information</td>
<td>No European Risk Phrases (labeling data)</td>
</tr>
<tr>
<td>Dangerous Components (CAS No.) wt%</td>
<td>None</td>
</tr>
</tbody>
</table>

USA Labeling:

Symbol: Not required
Hazard Warning: Not required
Safety Advice: Not required
Hazardous Component(s): None

16.0 Other information

Date Prepared: August 1, 2002
HP-DMS Document Control Number: 09000de780228472
Revision Information: This document replaces all prior versions of the MSDS
Material Safety Data Sheet

EU Information  This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC and USA OSHA Hazard Communications regulations (29CFR1910:1200).

DISCLAIMER: This Material Safety Data Sheet (MSDS) is provided without charge to customers of Hewlett-Packard. Data is the most current known to Hewlett-Packard at the time of preparation of this MSDS and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or their suitability for a particular application.