



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

Hazard Rating	US NFPA/HMIS
Health	1
Flammability	1
Instability/Reactivity	0
Special	N/A

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.

Component/Substance	CAS Number	EU Number	% by Weight	Risk Phrases
Styrene Acrylate Copolymer	-	-	40 - 50	-
Iron Oxide	1317-61-9	215-277-5	40 - 50	-

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:	LC ₅₀ :inh-rat>5mg/L/4 hrs. (data from similar toner), not harmful.
Ingestion:	LD ₅₀ :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

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)



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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/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. 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 (CAS No.) wt%	None
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:**

Revision Information: This document replaces all prior versions of the MSDS

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).

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