



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the preparation HP Color LaserJet C4193A Magenta Print Cartridge

Use of the preparation This product is a magenta toner preparation that is used in HP Color LaserJet 4500/4550 series printers.

Manufacturer information Hewlett-Packard Company
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Boise, ID 83714 USA

Hewlett-Packard health effects line

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General information telephone number

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Date prepared Mar 01, 2007

MSDS number 219833

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Component/substance | CAS number | % by weight |
|----------------------------|--------------|-------------|
| Styrene acrylate copolymer | Trade Secret | 60 - 80 |
| Wax | Trade Secret | 5 - 15 |
| Polyester resin | Trade Secret | 5 - 10 |
| Pigment | Trade Secret | 5 - 10 |
| Titanium dioxide | 13463-67-7 | < 0.5 |

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, 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.



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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. |
| Eye | 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. |
| 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 |
| Auto ignition temperature | Not applicable |
| Hazardous combustion products | Carbon monoxide and carbon dioxide. |
| Extinguishing media | CO ₂ , 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. |
| Fire fighting equipment/instructions | If fire occurs in the printer, treat as an electrical fire. |
| Special firefighting procedures | None established. |

6. ACCIDENTAL RELEASE MEASURES

| | |
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| Personal precautions | Minimize dust generation and accumulation. Avoid breathing dust. |
| Environmental precautions | Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations. |
| Procedures if material is released or spilled | 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 limit values | USA OSHA (TWA/PEL): 15 mg/m ³ (Total Dust), 5 mg/m ³ (Respirable Fraction) ACGIH (TWA/TLV): 10 mg/m ³ (Inhalable Particulate), 3 mg/m ³ (Respirable Particulate) |
|------------------------------|---|

| | | |
|--|------------|---------------------------------------|
| OSHA - Final PELs - Time Weighted Averages (TWAs) | | |
| Titanium dioxide | 13463-67-7 | 15 mg/m ³ TWA (total dust) |
| ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA) | | |
| Titanium dioxide | 13463-67-7 | 10 mg/m ³ TWA |



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Personal protective equipment

General

No personal respiratory protective equipment required under normal conditions of use.

Exposure guidelines

Use in a well ventilated area.

9. PHYSICAL & CHEMICAL PROPERTIES

| | |
|----------------------|---|
| pH | Not applicable |
| Vapor pressure | Not applicable |
| Boiling point | Not applicable |
| Softening point | 100 - 150 °C (212.0 - 302.0 °F) |
| Solubility | Negligible in water. Partially soluble in toluene and xylene. |
| Specific gravity | 1 - 1.2 (H ₂ O = 1) |
| Flash point | Not applicable |
| Viscosity | Not applicable |
| Vapor density | Not applicable |
| Evaporation rate | Not applicable |
| Flammability | Not flammable |
| Appearance | Fine powder |
| Form | solid |
| Odor | Slight plastic odor |
| Oxidizing properties | No information available. |
| Other information | Decomposition temperature: > 200° C |
| Color | Magenta |

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

| | |
|----------------------------------|---|
| Stability | Stable under normal storage conditions. |
| Hazardous polymerization | Will not occur. |
| Hazardous decomposition products | Carbon monoxide and carbon dioxide. |
| Incompatibility | Strong oxidizers |

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.

| | |
|---------------------|---|
| Dermal irritation | Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended. |
| 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. |
| Oral toxicity | LD50/oral/rat >2000 mg/kg , Not harmful. (OECD 401) |
| Inhalation toxicity | LC50: inh/rat > 5 mg/l/4 hrs., (OECD 403). |
| | Not classified for acute inhalation toxicity according to EU Directive 67/548/EEC and 1999/45/EC. |



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| | | |
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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). | |
| 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 | | |
| Titanium dioxide | 13463-67-7 | respiratory system (in animals: lung tumors) |

12. ECOLOGICAL INFORMATION

| | | |
|---------------------------|---|--|
| Environmental fate | | |
| Bioaccumulation | Titanium dioxide: Not bioaccumulated. | |
| Other information | No data available for ecological and wastewater treatment (sewage) systems. | |

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

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

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. | |
| 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).

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Revision 3

Replaces sheet dated Jan 22 2007 2:13PM

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: Use of the preparation
3. Hazards Identification: Routes of exposure
8. Exposure Controls/Personal Protection: Exposure limit values
9. Physical & Chemical Properties: Other information
11. Toxicological Information: Inhalation toxicity
13. Disposal Considerations: Disposal instructions
15. Regulatory Information: State 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 |