MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Identification of the preparation HP Color LaserJet Q6470A Black Print Cartridge

Use of the preparation This product is a black toner preparation that is used in HP Color LaserJet 3505/3600/3800 series printers.

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 May 22, 2007

MSDS number 194127

2. Composition / Information on Ingredients

Component/substance	CAS number	% by weight
Styrene acrylate copolymer	Trade Secret	75 - 85
Wax	Trade Secret	5 - 15
Carbon black	1333-86-4	1 - 6
Amorphous silica	7631-86-9	1 - 2

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 Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk.

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

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	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.
Fire fighting equipment/instructions	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.
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/m3 (Total Dust), 5 mg/m3 (Respirable Fraction)

ACGIH (TWA/TLV): 10 mg/m3 (Inhalable Particulate), 3 mg/m3 (Respirable Particulate)

Amorphous silica: USA OSHA (TWA/PEL): 20 mppcf 80 (mg/m3)/%SiO2, ACGIH (TWA/TLV): 10 mg/m3

ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA)

Carbon black	1333-86-4	3.5 mg/m3 TWA

OSHA - Final PELs - Time Weighted Averages (TWAs)

Carbon black	1333-86-4	3.5 mg/m3 TWA

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	212 - 302 °F (100 - 150 °C)
Solubility	Negligible in water. Partially soluble in toluene and xylene.
Specific gravity	1 - 1.2 (H2O = 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	Black

10. Chemical Stability & Reactivity Information

Stability	Stable under normal storage conditions.
Conditions to avoid	Imaging Drum: Exposure to light
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, (OECD 401), Not harmful.

Not classified for acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.

Inhalation toxicity No information available.

Not classified for acute inhalation toxicity according to EU Directive 67/548/EEC and 1999/45/EC.

Carcinogenicity Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

OSHA - Hazard Communication Carcinogens

Carbon black	1333-86-4	Present

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

NIOSH - Pocket Guide - Target Organs

Carbon black	1333-86-4	respiratory system, eyes (lymphatic cancer in presence of PAHs)

12. ECOLOGICAL INFORMATION

Other information This product has not been tested for ecological effects.

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

16. Other Information

Other information

This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

Issue date

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Revision

2

Replaces sheet dated

Feb 21 2007 5:21PM

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
3. Hazards Identification: Carcinogenicity
8. Exposure Controls/Personal Protection: Exposure limit values
Physical & Chemical Properties: Material Properties
9. Physical & Chemical Properties: Other information
11. Toxicological Information: Carcinogenicity
13. Disposal Considerations: Disposal instructions
Transportation Information: Material Transportation Information
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