



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the preparation HP Color LaserJet Q3964A Imaging Drum Cartridge

Use of the preparation This product is an imaging drum that is used in HP Color LaserJet 2550/2820/2840 series printers.

Manufacturer information Hewlett-Packard Company
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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 Oct 11, 2005

MSDS number 84444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight
Aluminum alloy	Trade Secret	95 - 98
Polyester resin	Trade Secret	0.2 - 1
Aryl amine derivative		0.2 - 1
Titanium dioxide	13463-67-7	0.2 - 1

3. HAZARDS IDENTIFICATION

Acute health effects

Skin contact Unlikely to cause skin irritation.

Eye contact Unlikely to cause irritation under normal use conditions.

Inhalation Unlikely to cause irritation under normal use conditions.

Ingestion Unlikely to cause irritation under normal use conditions.

Potential health effects

Routes of exposure Skin Contact

Chronic health effects None known.

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.

4. FIRST AID MEASURES

First aid procedures

Skin In case of irritation, wash with soap and water.

Eye Not applicable

Inhalation Not applicable

Ingestion Not applicable



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5. FIRE FIGHTING MEASURES

Flash point and method	Not applicable
Auto ignition temperature	Not applicable
Hazardous combustion products	Combustion will produce carbon dioxide, carbon monoxide, and nitrogen oxides.
Extinguishing media	Dry chemical, carbon dioxide.
Unsuitable extinguishing media	water or foam
Unusual fire and explosion hazard	None known.
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	Not applicable
Environmental precautions	See also section 13 Disposal considerations.
Procedures if material is released or spilled	Not applicable

7. HANDLING AND STORAGE

Handling	Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers. 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 at temperatures below 45°C. Keep the container tightly closed and dry. Store away from strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values	None established.	
OSHA - Final PELs - Time Weighted Averages (TWAs)		
Titanium dioxide	13463-67-7	15 mg/m3 TWA (total dust)
ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA)		
Titanium dioxide	13463-67-7	10 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
Melting point	> 100 °C (> 212.0 °F)
Solubility	Negligible. Partially soluble in ketones, esters, and aromatic solvents.
Specific gravity	No information available
Flash point	Not applicable
Viscosity	Not applicable
Vapor density	Not applicable



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Evaporation rate	Not applicable
Flammability	Not flammable
Appearance	Viridian aluminum cylinder
Form	solid
Odor	Odorless
Oxidizing properties	No information available.
Color	Greenish blue

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	No decomposition if stored normally.
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.
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

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

Disposal instructions	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. 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 .
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14. TRANSPORTATION INFORMATION

General	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.
IATA	
Proper shipping name	Not applicable
Special precautions	None
Packaging exceptions	None
Identification number (UN)	None
Packing group	N/A

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): Does not contain listed chemicals.
State regulations	This product contains no chemical substances subject to rules or orders under California Proposition 65.
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	Oct 11 2005 11:30PM
Revision	2
Replaces sheet dated	Apr 19 2005 1:15PM
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.



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MSDS sections updated

- 1. Chemical Product and Company Identification: Identification of the preparation
- 1. Chemical Product and Company Identification: Use of the preparation

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