



# Material Safety Data Sheet

## 1.0 Product and Company Identification

**Identification of the preparation**                      **HP Color LaserJet Black Print Cartridge Q2670A**

**Company Identification**                                      Hewlett-Packard Company  
11311 Chinden Boulevard  
Boise, Idaho 83714  
United States

**Emergency telephone number**                              1-800-457-4209 (USA and Canada)  
**Hewlett-Packard Health Effects Line**                      Intl: +1-503-494-7199 (all other areas)  
Singapore: +001-800-332-13321

**General information telephone number**                      1-208-323-2551 (USA and Canada)  
Intl: +1-208-323-2551 (all other areas)

**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 print cartridge that is used in Hewlett-Packard Color LaserJet 3500, 3550 and 3700 series printers.

Toner Component/Substance	CAS Number	EU Number	% by Weight	Risk Phrases
Styrene acrylate copolymer	-	-	75 - 85	-
Wax	-	-	5 - 15	-
Carbon black	1333-86-4	215-609-9	1 - 8	-
Amorphous silica	7631-86-9	231-545-4	1 - 2	-



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Image Drum Component/Substance	CAS Number	EU Number	% by Weight	Risk Phrases
Aluminum alloy	-	-	95.0 – 99.5	-
Polyester resin	-	-	0.2 – 1.0	-
Aryl amine derivative	-	-	0.2 – 1.0	-

## 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.

**Routes of Exposure** Toner & Image drum - Inhalation, Ingestion, skin and eyes.

### Acute Health Hazards

**Inhalation:** Toner - Respiratory tract irritation may occur with exposure to large amounts of dust.

Image drum - Not an applicable route of entry for intended use.

**Ingestion:** Toner - Low acute toxicity. Ingestion is a minor route of entry for intended use of this product.

Image drum - Not an applicable route of entry for intended use.

**Skin:** Toner & Image drum - Unlikely to cause skin irritation.

**Eyes:** Toner - May cause transient slight irritation.

Image drum - Not applicable under intended use.

### Chronic Health Hazards

Toner - 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.

Image drum - None known.

### Carcinogenicity

Toner - Carbon Black, in its unbound form, is listed as a Class 2B (Possible Human Carcinogen) by IARC. Carbon black in this product, due to its bound form, does not present a carcinogenic risk. This product contains no chemical substance subject to rules or orders under California Proposition 65. None of the other ingredients in this product are listed by IARC, NTP, EU, MAK, OSHA or ACGIH as a carcinogen. Refer also to section 11.

Image drum - Refer to Section 11.



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## 4.0 First Aid Measures

- Inhalation:** Toner - Move person to fresh air immediately. If symptoms occur, consult a physician.  
Image drum - Not applicable.
- Ingestion:** Toner - Rinse mouth out with water. Drink one to two glasses of water. If symptoms occur, consult a physician immediately.  
Image drum - Not applicable.
- Skin:** Toner & Image drum - Wash affected areas with soap and water. If irritation persists, consult a physician.
- Eyes:** Toner - Do not rub eyes. Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 5 minutes or until particles are removed. If irritation persists, consult a physician.  
Image drum - Not applicable.

## 5.0 Fire Fighting Measures

- Extinguishing media** Toner - CO<sub>2</sub>, water, dry chemical  
Image drum - CO<sub>2</sub>, dry chemical
- Unsuitable Extinguishing Media** Toner - None  
Image drum - Water or foam
- Special Firefighting Procedures** If fire occurs in the printer, treat as an electrical fire.  
\* Do Not extinguish with water or foam.\*
- Unusual fire and explosion hazards** Toner - Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.  
Image drum - None
- Auto-ignition temperature** Toner - Not available  
Image drum - Not applicable
- Flashpoint (method)** Toner & Image drum - Not applicable
- Hazardous Combustion Products** Toner - CO, CO<sub>2</sub>  
Image drum - CO, CO<sub>2</sub>, NO<sub>x</sub>



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## 6.0 Accidental release measures

**Spill or leak procedures** Toner - 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.  
Image drum - Not applicable.

**Environmental precautions** Toner - Do not discharge into drains (See also Section 13, Disposal Considerations).  
Image drum - See section 13 Disposal Considerations.

## 7.0 Handling and Storage

**Advice on safe handling and protection against fire** Toner - Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Use with adequate ventilation. Keep away from excessive heat, sparks, and open flames.  
Image drum - None

**Requirements for storage rooms and advise on storage compatibility** Toner - Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.  
Image drum - Maintain storage temperature less than 45°C.

## 8.0 Exposure control/ personal protection

### Exposure Limit Values

**USA OSHA (TWA/PEL):** Toner - 15 mg/m<sup>3</sup> (Total Dust)  
Image drum - None

Toner - 5 mg/m<sup>3</sup> (Respirable Fraction)  
Image drum - None

**ACGIH (TWA/TLV):** Toner - 10 mg/m<sup>3</sup> (Inhalable Particulate)  
Image drum - None

Toner - 3 mg/m<sup>3</sup> (Respirable Particulate)  
Image drum - None

**TRGS 900 (Luftgrenzwert):** Toner - 4 mg/m<sup>3</sup> (Einatembare Partikel)  
Image drum - None



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Toner - 1.5 mg/m<sup>3</sup> (Alveolengängige Fraktion)

Image drum – None

**Carbon black:** Toner – USA OSHA PEL - 3.5 mg/m<sup>3</sup> (TWA); ACGIH TLV - 3.5 mg/m<sup>3</sup> (TWA)

Image drum – None

**Amorphous silica:** Toner – USA OSHA PEL - 20 mppcf, 80(mg/m<sup>3</sup>)/% SiO<sub>2</sub> (TWA); ACGIH TLV - 10 mg/m<sup>3</sup> (TWA)

Image drum – None

## Exposure Controls

Image drum - Not required under normal conditions.

**Respiratory protection** Toner - Not required under intended use.

**Ventilation** Toner - Good general ventilation should be sufficient under intended use.

**Protective gloves** Toner - Not required under intended use.

**Eye protection** Toner - Not required under intended use.

**Other protective equipment** Toner - Not required under intended use.

## 9.0 Physical and chemical properties

**pH** Toner & Image drum - Not applicable.

**Boiling point** Toner & Image drum - Not applicable.

**Melting point** Toner: 100 - 150°C (Softening Point)  
Image drum: >100°C

**Flammability** Toner - Non-flammable solid (according to test methods of EU Directive 92/69/EEC and as amended, A10 Flammability (Solids).  
Image drum – Not applicable.

**Explosive properties** Toner - Toner material, like most organic material in powder form, is capable of creating a dust explosion.  
Image drum – None

**Oxidizing properties** Toner & Image drum - No data available.



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**Vapor Pressure** Toner & Image drum - Not applicable.

**Specific gravity (H<sub>2</sub>O=1)** Toner - 1.0 - 1.2  
Image drum - No data available.

**Solubility in water** Toner - Negligible  
Image drum - Not soluble.

**Solubility in organic solvents** Toner - Partially soluble in toluene and xylene.  
Image drum - Partially soluble in ketones, esters and aromatic solvents.

**Partition coefficient** Toner - Not applicable.  
Image drum - Not soluble in n-octanol.

**Viscosity** Toner & Image drum - Not applicable.

**Vapor density** Toner & Image drum - Not applicable.

**Evaporation rate** Toner & Image drum - Not applicable.

**Physical state** Toner - Fine powder  
Image drum - Viridian aluminum cylinder

**Color** Toner - Black  
Image drum - Greenish blue

**Odor** Toner - Slight plastic odor  
Image drum - Odorless

**Other** Toner - Decomposition Temperature: >200 °C  
Image drum - None known

## 10.0 Stability and reactivity

**Stability** Toner & Image drum - Stable under normal storage conditions.

**Incompatibilities** Toner - Strong oxidizers  
Image drum - None

**Hazardous decomposition products** Toner - CO, CO<sub>2</sub>  
Image drum - CO, CO<sub>2</sub>, NO<sub>x</sub>

**Hazardous polymerization** Toner & Image drum - Will not occur.



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## 11.0 Toxicological information

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

**Ingestion:** Toner - LD<sub>50</sub>: orl-rat>2000 mg/kg, not harmful.  
Image drum coating – No data available.

**Inhalation:** Toner & Image drum coating - No data available.

**Eye contact:** Toner & Image drum coating - Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.

**Skin contact:** Toner - Not classified as irritant, according to OSHA Hazard Communication Standard (HCS) and EU Directive 67/548/EEC and as amended.  
Image drum coating - No data available.

**Mutagenicity:** Toner & Image drum coating - Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium).

**Reproductive Toxicity:** Toner - Not classified as toxic according to EU Directive 67/548/EEC and as amended, California Prop. 65, and DFG (Germany).  
Image drum coating - No data available.

**Sensitization:** Toner & Image drum coating - Not classified as a sensitizer according to EU Directive 67/548/EEC and as amended, and OSHA HCS (US).

**Carcinogenicity:** Toner - Carbon Black, in its unbound form, is listed as a Class 2B (Possible Human Carcinogen) by IARC. Carbon black in this product, due to its bound form, does not present a carcinogenic risk. This product contains no chemical substance subject to rules or orders under California Proposition 65. None of the other ingredients in this product are listed by IARC, NTP, EU, MAK, OSHA or ACGIH as a carcinogen.  
Image drum coating - Not a known or suspected carcinogen according to IARC, NTP, OSHA Regulations (USA), EU Directive, or Proposition 65 (California).

**Chronic Toxicity:** Toner & Image drum coating – None

**Other:** Toner & Image drum coating – None



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## 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 regulation.

## 14.0 Transportation information

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

<b>UN Number</b>	<u>Toner &amp; Image drum</u> - None
<b>Class</b>	<u>Toner &amp; Image drum</u> - None
<b>Proper Shipping Name</b>	<u>Toner &amp; Image drum</u> - None
<b>Packing Group</b>	<u>Toner &amp; Image drum</u> - None
<b>Special Precautions</b>	<u>Toner &amp; Image drum</u> - None

## 15.0 Regulatory information

**US EPA TSCA Inventory** Toner & Image drum - All chemical substances in this product comply with all rules or orders under TSCA.

**US EPA TSCA 12(b)** Toner - Contains p-Xylene - [CAS No. 106-42-3]  
Image drum - None

**US California Proposition 65** Toner & Image drum - None

**EU Notification** Toner & Image drum - All components in this product are compliant with EU Chemical Inventory regulations.

**EU R&S Phrase Information** Toner & Image drum - No European Risk Phrases (labeling data).

**Dangerous Components (CAS No.) wt%** Toner & Image drum - None

**USA Labeling Symbol** Toner & Image drum - Not required

**Hazard Warning** Toner & Image drum - Not required

**Safety Advice** Toner & Image drum - Not required



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Hazardous Component(s) Toner & Image drum – None

## 16.0 Other information

**Date Prepared:** October 1, 2004  
**HP-DMS Document Control Number:** 09000de78027bdb6-eng  
**Revision Information:** The replaces all prior versions of the MSDS  
**EU Information:** This MSDS was prepared in compliance with EU Directive 91/155/EEC and 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 product as described or its suitability for a particular application.