



# Material Safety Data Sheet

## 1.0 Product and Company Identification

**Identification of the preparation**                      **HP Color LaserJet Cyan Print Cartridge Q2681A**

**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 cyan print cartridge that is used in Hewlett-Packard Color LaserJet 3700 series printers.

Toner Component/Substance	CAS Number	EU Number	% by Weight	Risk Phrases
Styrene Acrylate Copolymer	-	-	75 - 85	-
Wax	-	-	5 - 10	-
Copper Compound	-	-	1 - 5 (as Cu: 0.1-0.5)	-
Amorphous silica	7631-86-9	231-545-4	1 - 2	-



# Material Safety Data Sheet

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 & Image drum - Refer to Section 11.

## 4.0 First Aid Measures

**Inhalation:** Toner - Move person to fresh air immediately. If symptoms occur, consult a physician.

Image drum - Not applicable.



# Material Safety Data Sheet

**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>

## 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.



# Material Safety Data Sheet

**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

Toner - 1.5 mg/m<sup>3</sup> (Alveolengängige Fraktion)  
Image drum - None

**Copper compound:** Toner - DFG MAK - 1.0 mg/m<sup>3</sup> (Inhalable fraction) Cu and its compounds.  
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)



# Material Safety Data Sheet

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.

**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.



# Material Safety Data Sheet

**Partition coefficient** Toner - Not applicable.  
Image drum – Not soluble in water and 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 - Cyan  
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.

## 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 - 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.



# Material Safety Data Sheet

**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 - - Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium).

**Carcinogenicity:** Toner - Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, and Proposition 65 (California).  
Image drum coating - Not a known or suspected carcinogen according to any IARC Monograph, NTP, OSHA Regulations (USA), EU Directive, and Proposition 65 (California).

**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 - - Not classified as a sensitizer according to EU Directive 67/548/EEC and as amended, and OSHA HCS (US).

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

**Other:** Toner & Image drum – None

## 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

**UN Number** Toner & Image drum - None



# Material Safety Data Sheet

**Class** Toner & Image drum - None  
**Proper Shipping Name** Toner & Image drum - None  
**Packing Group** Toner & Image drum - None  
**Special Precautions** Toner & Image drum - 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

**Hazardous Component(s)** Toner & Image drum - None

## 16.0 Other information

**Date Prepared:** July 1, 2004  
**HP-DMS Document Control Number:**

**Revision Information:**

**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).

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





# Material Safety Data Sheet

construed as guaranteeing specific properties of the product as described or its suitability for a particular application.