



# Material Safety Data Sheet

## 1. Product and Company Identification

<b>Material name</b>	HP E60FKC Yellow Developer
<b>Use of the preparation</b>	This product is a yellow developer preparation that is used in HP 9850mfp series digital copiers.
<b>Version #</b>	04
<b>Revision date</b>	06-May-2009
<b>Company identification</b>	Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501
	Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomerinquiries@hp.com
<b>Date prepared</b>	May 06, 2009
<b>MSDS number</b>	430775

## 2. Hazards Identification

<b>Acute health effects</b>	
<b>Skin contact</b>	Unlikely to cause skin irritation.
<b>Eye contact</b>	May cause transient slight irritation
<b>Inhalation</b>	Minimal respiratory tract irritation may occur with exposure to large amounts of toner dust.
<b>Ingestion</b>	Low acute toxicity. Unlikely to cause irritation under normal use conditions.
<b>Potential health effects</b>	
<b>Routes of exposure</b>	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.
<b>Chronic health effects</b>	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.
<b>Carcinogenicity</b>	None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.
<b>Other information</b>	This product is not classified as hazardous according to OSHA CFR 1910.1200 or EU Directive 1999/45/EC, as amended.

## 3. Composition / Information on Ingredients

Component/Substance	CAS Number	% By Weight
<b>Toner</b>		
Styrene acrylate copolymer	Trade Secret	< 90
Wax	Trade Secret	< 20
Amorphous silica	7631-86-9	< 10
Organic pigment	Trade Secret	< 10
Strontium titanate	12060-59-2	< 10



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**Carrier**

Iron oxide	1317-61-9	< 50
Magnesium Oxide Fume	1309-48-4	< 40
Acrylic resin	Trade Secret	< 10
Manganese oxide (MnO)	1344-43-0	< 10

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**4. First Aid Measures****First aid procedures**

<b>Eye contact</b>	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, consult a physician.
<b>Skin contact</b>	Wash affected areas with soap and water. If irritation persists, consult a physician.
<b>Inhalation</b>	Move person to fresh air immediately. If irritation persists, consult a physician.
<b>Ingestion</b>	Rinse mouth out with water. Drink one to two glasses of water. If symptoms occur, consult a physician.

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**5. Fire Fighting Measures**

<b>Flash point and method</b>	Not applicable
<b>Hazardous combustion products</b>	Carbon monoxide and carbon dioxide.
<b>Flammable properties</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	CO2, water, or dry chemical
<b>Unsuitable extinguishing media</b>	None known.
<b>Unusual fire and explosion hazard</b>	Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.
<b>Protection of firefighters</b>	
<b>Protective equipment and precautions for firefighters</b>	If fire occurs in the printer, treat as an electrical fire.
<b>Special firefighting procedures</b>	None established.

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**6. Accidental Release Measures**

<b>Personal precautions</b>	Minimize dust generation and accumulation.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system. See also section 13 Disposal considerations.
<b>Other information</b>	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.

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**7. Handling and Storage**

<b>Handling</b>	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.
<b>Storage</b>	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.

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## 8. Exposure Controls / Personal Protection

<b>Exposure guidelines</b>	USA OSHA (TWA/PEL): 15 mg/m <sup>3</sup> (Total Dust), 5 mg/m <sup>3</sup> (Respirable Fraction) ACGIH (TWA/TLV): 10 mg/m <sup>3</sup> (Inhalable Particulate), 3 mg/m <sup>3</sup> (Respirable Particulate) Amorphous silica: USA OSHA (TWA/PEL): 20 mppcf 80 (mg/m <sup>3</sup> )/%SiO <sub>2</sub> , ACGIH (TWA/TLV): 10 mg/m <sup>3</sup>
<b>Personal protective equipment</b>	
<b>General</b>	No personal respiratory protective equipment required under normal conditions of use.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Fine powder
<b>Color</b>	Yellow
<b>Odor</b>	Slight plastic odor
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Not available.
<b>Form</b>	solid
<b>pH</b>	Not applicable
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	Not applicable <i>Carrier</i> Not available. <i>Toner</i> Not available.
<b>Flammability</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not flammable
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Specific gravity</b>	5 (H <sub>2</sub> O = 1) <i>Carrier</i> Not available. <i>Toner</i> Not available.
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Negligible in water. Partially soluble in toluene and xylene.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available. <i>Carrier</i> Not available. <i>Toner</i> Not available.
<b>Softening point</b>	212 - 302 °F (100 - 150 °C)



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Viscosity Not applicable  
Other information Decomposition temperature: > 200 ° C

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## 10. Chemical Stability & Reactivity Information

Chemical stability Stable under normal storage conditions.  
Incompatible materials Strong oxidizers  
Hazardous decomposition products Carbon monoxide and carbon dioxide.  
Possibility of hazardous reactions Will not occur.

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## 11. Toxicological Information

Component analysis - LD50 Amorphous silica: LD50: oral/rat: 3160 mg/kg, not harmful. Ames test negative.  
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 LC50: inh/rat 4.80 mg/l/4 hrs., (OECD 403).  
Not classified for acute inhalation toxicity according to EU Directive 67/548/EEC and 1999/45/EC.  
Eye irritation Minimal irritant in rabbit (OECD 405)  
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.  
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.  
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).

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## 12. Ecological Information

Persistence and degradability Not available.

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## 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>.

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## 14. Transport Information

Not available.

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

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## 15. Regulatory Information

US federal regulations US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.



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**CERCLA (Superfund) reportable quantity**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

**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.

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**16. Other Information**

**HMIS® ratings** Health: 1  
Flammability: 1  
Physical hazard: 0

**NFPA ratings** Health: 1  
Flammability: 1  
Instability: 0

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**Revision** 4

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**Manufacturer information** Hewlett-Packard Company  
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Boise, ID 83714 USA  
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(Toll-free within the US) 1-800-457-4209

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

**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** Hazards Identification: Other information  
15. Regulatory Information: US federal regulations



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## Explanation of abbreviations

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds