1. Product and Company Identification

Material name: HP E5A5KC Developer

Use of the preparation: This product is a developer preparation that is used in HP 9085mfp series digital copiers.

Version #: 04

Revision date: 05-May-2009

Company identification: 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

Date prepared: May 04, 2009

MSDS number: 425385

2. 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. Unlikely to cause irritation under normal use conditions.

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: 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, as amended.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component/Substance</th>
<th>CAS Number</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Styrene acrylate copolymer</td>
<td>Trade Secret</td>
<td>&lt; 90</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>&lt; 12</td>
</tr>
<tr>
<td>Wax</td>
<td>Trade Secret</td>
<td>&lt; 12</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>7631-86-9</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>
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4. First Aid Measures

First aid procedures

Eye contact: Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, consult a physician.

Skin contact: Wash affected areas with soap and water. 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

Hazardous combustion products: Carbon monoxide and carbon dioxide.

Flammable properties: Like most organic material in powder form, toner can form explosive dust-air mixtures when finely dispersed in air.

Extinguishing media

Suitable 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.

Protection of firefighters

Protective equipment and precautions for firefighters: 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.

Other information: 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 guidelines**
- 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

**Personal protective equipment**
- **General**: No personal respiratory protective equipment required under normal conditions of use.

9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Fine powder</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight plastic odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Not available.</td>
</tr>
<tr>
<td>Form</td>
<td>solid</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>212 - 302 °F (100 - 150 °C) (Softening point)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.2 (H₂O = 1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Negligible in water. Partially soluble in toluene and xylene.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Softening point</td>
<td>212 - 302 °F (100 - 150 °C)</td>
</tr>
</tbody>
</table>
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Viscosity
Not applicable

Other information
Decomposition temperature: > 200 degrees C

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.

11. Toxicological Information

Component analysis - LD50
Amorphous silica: LD50: oral/rat: 3160 mg/kg, not harmful. Ames test negative.
Titanium dioxide: LD50: oral/rat >5000 mg/kg, not harmful. Ames test negative, not an eye irritant, not a skin irritant, and not a skin sensitizer.

Oral toxicity

Inhalation toxicity
LC50: inh/rat 5690 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
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.

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).

12. Ecological Information

Persistence and degradability
Not available.

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. Transport Information

Not available.

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

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

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.

16. Other Information

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

NFPA ratings
Health: 1
Flammability: 1
Instability: 0

Issue date
May 4 2009 5:33PM

Revision
4

Replaces sheet dated
Mar 9 2007 2:01PM

Manufacturer information
Hewlett-Packard Company
11311 Chinden Boulevard
Boise, ID 83714 USA
(Direct) 1-503-494-7199
(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
8. Exposure Controls / Personal Protection: Exposure guidelines
15. Regulatory Information: US federal regulations
### Material Safety Data Sheet

**Explanation of abbreviations**

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