1. Product and Company Identification

<table>
<thead>
<tr>
<th>Material name</th>
<th>Q2389A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the preparation</td>
<td>Inkjet printing</td>
</tr>
<tr>
<td>Version #</td>
<td>07</td>
</tr>
<tr>
<td>Revision date</td>
<td>02-17-2009</td>
</tr>
<tr>
<td>CAS #</td>
<td>Mixture</td>
</tr>
<tr>
<td>Company identification</td>
<td>Hewlett-Packard Company</td>
</tr>
<tr>
<td></td>
<td>3000 Hanover Street</td>
</tr>
<tr>
<td></td>
<td>Palo Alto, CA 94304-1185</td>
</tr>
<tr>
<td></td>
<td>United States</td>
</tr>
<tr>
<td></td>
<td>Telephone 650-857-1501</td>
</tr>
<tr>
<td>Hewlett-Packard health effects line</td>
<td>(Toll-free within the US) 1-800-457-4209</td>
</tr>
<tr>
<td></td>
<td>(Direct) 1-503-494-7199</td>
</tr>
<tr>
<td>HP Customer Care Line</td>
<td>(Toll-free within the US) 1-800-474-6836</td>
</tr>
<tr>
<td></td>
<td>(Direct) 1-208-323-2551</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:hpcustomerinquiries@hp.com">hpcustomerinquiries@hp.com</a></td>
</tr>
<tr>
<td>Date prepared</td>
<td>Feb 16, 2009</td>
</tr>
</tbody>
</table>

2. Hazards Identification

Emergency overview

Contact with skin and eyes may result in irritation. Contact with skin and eyes may result in irritation.

Acute health effects

Any potential hazards are presumed to be due to exposure to the components.

Skin contact

2-pyrrolidone
Contact with skin may result in irritation.

Eye contact

2-pyrrolidone
Contact with eyes may result in irritation.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Potential health effects

Routes of exposure

Potential routes of overexposure to this product are skin and eye contact

Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions.

Chronic health effects

Carbon Black: Chronic inhalation studies performed with fine dust particles resulted in lung tumors in animals. The IARC classification was based upon these results. IARC also concluded "there is inadequate evidence in humans for the carcinogenicity of carbon black."

Inhalation of fine dust particles is not expected to occur during normal conditions of use of this ink.

Carcinogenicity

Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans) . None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.
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>Water</td>
<td>7732-18-5</td>
<td>&lt; 80</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>&lt; 10</td>
</tr>
</tbody>
</table>

Composition comments: This ink supply contains an aqueous ink formulation. This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

4. First Aid Measures

**First aid procedures**

- **Eye contact**: Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
- **Skin contact**: Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
- **Inhalation**: Move to fresh air. If symptoms persist, get medical attention.
- **Ingestion**: If ingestion of a large amount does occur, seek medical attention.

5. Fire Fighting Measures

- **Flash point and method**: > 200 °F (> 93.3 °C); Pensky-Martens Closed Cup
- **Hazardous combustion products**: Refer to section 10.
- **Flammable properties**: None known.
- **Extinguishing media**
  - Suitable extinguishing media: CO2, water, dry chemical, or foam
  - Unsuitable extinguishing media: None known.
- **Unusual fire and explosion hazard**: None established.
- **Special firefighting procedures**: None established.

6. Accidental Release Measures

- **Personal precautions**: Wear appropriate personal protective equipment.
- **Environmental precautions**: Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
- **Methods for containment**: Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.
- **Methods for cleaning up**: Soak up with inert absorbent material.
- **Other information**: Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations.

7. Handling and Storage

- **Handling**: Avoid contact with skin, eyes and clothing.
- **Storage**: Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure Controls / Personal Protection

- **Exposure guidelines**: Exposure limits have not been established for this product.
- **Personal protective equipment**
  - **General**: Use personal protective equipment to minimize exposure to skin and eye.
  - **Skin protection**: Protected gloves not required under intended use.
9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>7.8 - 8.8</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200 °F (&gt; 93.3 °C); Pensky-Martens Closed Cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</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 determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt; 1 (air = 1.0)</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1 - 1.2</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>VOC</td>
<td>&lt; 3 %</td>
</tr>
<tr>
<td>Viscosity</td>
<td>&gt; 2 cp</td>
</tr>
</tbody>
</table>

10. Chemical Stability & Reactivity Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Incompatible with strong bases and oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

11. Toxicological Information

Carcinogenicity

IARC Monographs on Occupational Exposures to Chemical Agents: Evidence of carcinogenicity in humans
Carbon black (1333-86-4) Inadequate data.
US ACGIH Threshold Limit Values: A4 carcinogen
Carbon black (1333-86-4) Group A4 Not classifiable as a human carcinogen.

Symptoms and target organs

Target Organs (NIOSH)
Carbon black (1333-86-4) Eyes
Carbon black (1333-86-4) Respiratory system
12. Ecological Information

Aquatic toxicity: LC50/96h/Fathead minnows => 750 mg/L
Persistence and degradability: Not available.

13. Disposal Considerations

Disposal instructions: 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

IATA

Proper shipping name: Not applicable
Hazard class: Not applicable
UN number: None
Packing group: N/A
Packaging exceptions: None

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

15. Regulatory Information

US federal regulations: US TSCA 12(b): Contains tetrahydrofuran (CASRN 109-99-9), subject to export notification requirements.
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. 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.

State regulations:
US - Pennsylvania RTK - Hazardous Substances: Listed substance
2-pyrrolidone (616-45-5) Listed.
Carbon black (1333-86-4) Listed.

16. Other Information

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

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

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

Manufacturer information
Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis, OR 97330-4239 US
(Direct) 1-503-494-7199
(Toll-free within the US) 1-800-457-4209