1. Product and Company Identification

Identification of the preparation: C9391A
Product use: Inkjet printing
Version #: 07
Revision date: 12-Oct-2011
CAS #: Mixture

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: hpcustomer.inquiries@hp.com

2. Hazards Identification

Emergency overview: 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:
- 1-(2-hydroxyethyl)-2-pyrrolidone
  Contact with skin may result in irritation.
- 2-pyrrolidone
  Contact with skin may result in irritation.
- Aliphatic diol
  Contact with skin may result in irritation.

Eye contact:
- 1-(2-hydroxyethyl)-2-pyrrolidone
  Contact with eyes may result in irritation.
- 2-pyrrolidone
  Contact with eyes may result in irritation.
- Aliphatic diol
  Contact with eyes may result in irritation.

Inhalation:
- 1-(2-hydroxyethyl)-2-pyrrolidone
  Inhalation may result in respiratory irritation.
- 2-pyrrolidone
  Inhalation may result in respiratory irritation.
- Aliphatic diol
  Inhalation may result in respiratory irritation.

Ingestion:
- 1-(2-hydroxyethyl)-2-pyrrolidone
  Ingestion may result in nausea, vomiting and diarrhea.
- 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. Complete toxicity data are not available for this specific formulation.
Chronic health effects
None known.

Carcinogenicity
None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>70 - 80</td>
</tr>
<tr>
<td>1-(2-hydroxyethyl)-2-pyrrolidone</td>
<td>3445-11-2</td>
<td>7.5 - 10</td>
</tr>
<tr>
<td>Aliphatic diol</td>
<td>Proprietary</td>
<td>7.5 - 10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>2.5 - 5</td>
</tr>
<tr>
<td>Substituted phthalocyanine salt # 4</td>
<td>Proprietary</td>
<td>2.5 - 5</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. Get medical attention if irritation develops or persists.
- **Inhalation**: Remove 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

Flammable properties
None known.

Extinguishing media
- **Suitable extinguishing media**: Dry chemical, CO2, water spray or regular foam.
- **Unsuitable extinguishing media**: None known.

Specific methods
None established.

Hazardous combustion products
Refer to section 10.

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.

Engineering controls
Use in a well ventilated area.

Personal protective equipment
- **General hygiene considerations**: Handle in accordance with good industrial hygiene and safety practice.
General

Use personal protective equipment to minimize exposure to skin and eye.

9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Not available.</td>
</tr>
<tr>
<td>Color</td>
<td>Cyan</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>7.1 - 7.7</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) Setaflash Closed Tester</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</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>Not available.</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>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2 cp</td>
</tr>
<tr>
<td>VOC</td>
<td>&lt; 273 g/L</td>
</tr>
<tr>
<td>Other information</td>
<td>VOC content (less water, less exempt compounds) = &lt; 1308 g/L (U.S. requirement, not for emissions)</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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Not available.</td>
</tr>
<tr>
<td>Further information</td>
<td>This ink formulation has not been tested for toxicological effects. Refer to Section 2 for potential health effects and Section 4 for first aid measures.</td>
</tr>
</tbody>
</table>

12. Ecological Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic toxicity</td>
<td>LC50/96h/Fathead minnows =&gt; 750 mg/L</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

13. Disposal Considerations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal instructions</td>
<td>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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>.</td>
</tr>
</tbody>
</table>
14. Transport Information

Further information
Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

RID
Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations
US TSCA 12(b): Does not contain listed chemicals.

CERCLA (Superfund) reportable quantity
None

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200
hazardous chemical
No

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

State regulations
US - Pennsylvania RTK - Hazardous Substances: Listed substance
2-pyrrolidone (CAS 616-45-5) Listed.

Regulatory information
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

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

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

NFPA ratings
Health: 1
Flammability: 1
Instability: 0

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.

Issue date
12-Oct-2011

This data sheet contains changes from the previous version in section(s):
Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients
14. Transport Information: Further information
Manufacturer information

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(Toll-free within the US) 1-800-457-4209

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