1. Product and Company Identification

<table>
<thead>
<tr>
<th>Material name</th>
<th>C4909A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the preparation</td>
<td>Inkjet printing</td>
</tr>
<tr>
<td>Version #</td>
<td>01</td>
</tr>
<tr>
<td>Revision date</td>
<td>12-23-2008</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 (Toll-free within the US)</td>
<td>1-800-457-4209</td>
</tr>
<tr>
<td>(Direct)</td>
<td>1-503-494-7199</td>
</tr>
<tr>
<td>HP Customer Care Line (Toll-free within the US)</td>
<td>1-800-474-6836</td>
</tr>
<tr>
<td>(Direct)</td>
<td>1-208-323-2551</td>
</tr>
<tr>
<td>Date prepared</td>
<td>Dec 23, 2008</td>
</tr>
<tr>
<td>MSDS number</td>
<td>323076</td>
</tr>
</tbody>
</table>

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.
Alkoxy ether phosphate
Contact with skin may result in severe irritation.
Tetraethylene glycol
Contact with skin may result in irritation.
Yellow pigment
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.
Alkoxy ether phosphate
Contact with eyes may result in irritation.
Tetraethylene glycol
Contact with eyes may cause irritation.
Yellow pigment
Contact with eyes may result in irritation.
# MATERIAL SAFETY DATA SHEET

## 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.

Alkoxy ether phosphate
Inhalation may result in respiratory irritation.

Tetraethylene glycol
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.

Alkoxy ether phosphate
Irritating to mouth, throat, and stomach.

## 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>Component/substance</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 70</td>
</tr>
<tr>
<td>1-(2-hydroxyethyl)-2-pyrrolidone</td>
<td>3445-11-2</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Aliphatic diol</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Tetraethylene glycol</td>
<td>112-60-7</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Yellow pigment</td>
<td>No Data</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Alkoxy ether phosphate</td>
<td>Proprietary</td>
<td>&lt; 2</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 affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

#### Ingestion

If ingestion of a large amount does occur, seek medical attention.

## 5. Fire Fighting Measures

### Flash point and method

> 230 °F (> 110 °C) US EPA Method 1020; Setaflash Closed Tester

### Hazardous combustion products

Refer to section 10.
## MATERIAL SAFETY DATA SHEET

### Flammable properties
Combustion generates toxic fumes of fluoride and/or fluorine compounds; phosphorous oxides.

### Extinguishing media
- **Suitable extinguishing media**: CO2, water, dry chemical, or foam
- **Unsuitable extinguishing media**: None known.
- **Unusual fire and explosion hazard**: Combustion generates toxic fumes of fluoride and/or fluorine compounds; phosphorous oxides.
- **Special firefighting procedures**: Wear self contained breathing apparatus for fire fighting if necessary.

### 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. 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 away from excessive heat or cold. Keep out of the reach of children.

### 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.
  - **General hygene considerations**: Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical & Chemical Properties
- **Color**: Yellow
- **Odor threshold**: Not available.
- **Physical state**: Liquid.
- **pH**: 8.7 - 9.1
- **Melting point**: Not available.
- **Freezing point**: Not available.
- **Boiling point**: Not determined
- **Flash point**: > 230 °F (> 110 °C) US EPA Method 1020; Setaflash Closed Tester
- **Evaporation rate**: Not determined
- **Flammability**: Not available.
- **Flammability limits in air, upper, % by volume**: Not available.
- **Flammability limits in air, lower, % by volume**: Not determined
- **Vapor pressure**: Not determined
- **Vapor density**: > 1 (air = 1.0)
- **Specific gravity**: 1 - 1.1
- **Relative density**: Not available.
- **Solubility (water)**: Soluble in water
Partition coefficient (n-octanol/water) | Not available.
---|---
Auto-ignition temperature | Not determined
Decomposition temperature | Not available.
Viscosity | > 3 cP

10. Chemical Stability & Reactivity Information

**Chemical stability** | Stable under recommended storage conditions.
**Incompatible materials** | Incompatible with strong bases and oxidizing agents.
**Hazardous decomposition products** | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may yield oxides of phosphorus, hydrogen fluoride, fluorinated hydrocarbons.
**Possibility of hazardous reactions** | Will not occur.

11. Toxicological Information

Not available.

12. Ecological Information

**Ecotoxicity** | 96.00 hr, LC50 > 750 mg/l, fathead minnow (pimephales promelas)
**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](http://www.hp.com/recycle).

14. Transport Information

**IATA** | Not regulated as dangerous goods.
**General** | Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

15. Regulatory Information

**US federal regulations** | US TSCA 12(b): Does not contain listed chemicals.
**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
Dec 23 2008  9:47AM

Revision
1

Replaces sheet dated
Dec 18 2008  8:52PM

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.

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