1. Product and Company Identification

Identification of the preparation: C4907 Series

Product use: Inkjet printing

Version #: 06

Revision date: 18-Oct-2012

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.

Alkoxy ether phosphate
Contact with skin may result in severe irritation.

Cyan pigment
Contact with skin may result in irritation.

Tetraethylene glycol
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.

Cyan pigment
Contact with eyes may result in irritation.

Tetraethylene glycol
Contact with eyes may cause 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.

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.

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>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; 7.5</td>
</tr>
<tr>
<td>Aliphatic diol</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Alkoxy ether phosphate</td>
<td>Proprietary</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Cyan pigment</td>
<td>Proprietary</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>Tetraethylene glycol</td>
<td>112-60-7</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 70</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.

General advice
No additional information

5. Fire Fighting Measures

Flammable properties
Combustion generates toxic fumes of fluoride and/or fluorine compounds; phosphorus oxides.
Extinguishing media

Suitable extinguishing media
- CO2, water, dry chemical, or foam

Unsuitable extinguishing media
- None known.

Specific methods
- Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
- Refer to section 10.

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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.

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.

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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.

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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.

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9. Physical & Chemical Properties

Appearance
- Not available.

Color
- Cyan

Odor
- Not available.

Odor threshold
- Not available.

Physical state
- Liquid

Form
- Not available.

pH
- 8.7

Melting point
- Not available.

Freezing point
- Not available.

Boiling point
- Not determined

Flash point
- 230 °F (110 °C) Setaflash Closed Tester US EPA Method 1020

Evaporation rate
- Not determined

Flammability limits in air, upper, % by volume
- Not available.

Flammability limits in air, lower, % by volume
- Not determined

Vapor pressure
- Not determined

Vapor density
- Not available.

Specific gravity
- 1

Relative density
- Not available.

Solubility (water)
- Soluble in water

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
Serious eye damage/eye irritation Not available.
Further information 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.

12. Ecological Information
Aquatic toxicity This product has not been tested for ecological effects.
Persistence and degradability Not available.

13. Disposal Considerations
Disposal instructions Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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
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.
DEA Exempt Chemical Mixtures Code Number Not regulated.
Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c)) Not regulated.
Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number Not listed.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.
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. Massachusetts RTK - Substance List
2-pyrrolidone (CAS 616-45-5)

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

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

US. Rhode Island RTK
Not regulated.

Regulatory information

The components of this product are reported in the following inventories: United States of America, European Union, Switzerland, Canada, Australia, Philippines, Korea, New Zealand and China.

Other information


Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).

VOC content (less water, less exempt compounds) = <1184 g/L (U.S. requirement, not for emissions).

VOC data based on formulation (Organic compounds minus solids)

16. 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

18-Oct-2012

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Alternate Trade Names
9. Physical & Chemical Properties: Other information
15. Regulatory Information: Regulatory information
15. Regulatory Information: Other information
Manufacturer information  
Hewlett-Packard Company  
3000 Hanover Street  
Palo Alto, California 94304-1112 US  
(Direct) 1-503-494-7199  
(Toll-free within the US) 1-800-457-4209

Explanation of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
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<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>
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<tr>
<td>COC</td>
<td>Cleveland Open Cup</td>
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<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>
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<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
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<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
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<tr>
<td>REC</td>
<td>Recommended</td>
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<tr>
<td>REL</td>
<td>Recommended Exposure Limit</td>
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<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act of 1986</td>
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<tr>
<td>STEL</td>
<td>Short-Term Exposure Limit</td>
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<tr>
<td>TCLP</td>
<td>Toxicity Characteristics Leaching Procedure</td>
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<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
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<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
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</table>