



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** C4912A  
**Use of the preparation** Inkjet printing  
**Version #** 04  
**Revision date** 02-15-2009  
**CAS #** Mixture  
**Company identification** Hewlett-Packard Company  
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Palo Alto, CA 94304-1185  
United States  
Telephone 650-857-1501

HP 82 (69ml) Magenta Ink Cartridge

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**Date prepared** Feb 14, 2009

## 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

*1,5-pentanediol*  
Contact with skin may result in irritation.

*2-pyrrolidone*  
Contact with skin may result in irritation.

*Alkyldicarboxylic acid*  
Contact with skin may result in irritation.

*Tetraethylene glycol*  
Contact with skin may result in irritation.

#### Eye contact

*1,5-pentanediol*  
Contact with eyes may result in irritation.

*2-pyrrolidone*  
Contact with eyes may result in irritation.

*Alkyldicarboxylic acid*  
Contact can cause moderate to severe irritation and possible injury to the eyes.

*Substituted xanthylum salt #1*  
Contact with eyes may result in mild irritation.

*Tetraethylene glycol*  
Contact with eyes may cause irritation.

#### Inhalation

*2-pyrrolidone*  
Inhalation may result in respiratory irritation.

*Alkyldicarboxylic acid*  
Inhalation may result in respiratory irritation.

*Tetraethylene glycol*  
Inhalation may result in respiratory irritation.



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## Ingestion

### 2-pyrrolidone

Ingestion may result in nausea, vomiting and diarrhea.

### Alkyldicarboxylic acid

Ingestion can cause gastrointestinal irritation, 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

Component/substance	CAS number	% by weight
Water	7732-18-5	< 80
1,5-pentanediol	111-29-5	< 20
2-pyrrolidone	616-45-5	< 10
Alkyldicarboxylic acid	Proprietary	< 10
Tetraethylene glycol	112-60-7	< 10
Substituted xanthylum salt #1	Proprietary	< 2.5

### 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

### 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

Dry chemical, CO2, water spray or regular foam.

#### Unsuitable extinguishing media

None known.

### Unusual fire and explosion hazard

None known.

### 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.



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**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.

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

<b>Color</b>	Magenta
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>pH</b>	3.8 - 4.2
<b>Melting point</b>	Not available.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	Not determined
<b>Flash point</b>	> 200 °F (> 93.3 °C); Pinsky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not determined
<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	> 1 (air = 1.0)
<b>Specific gravity</b>	1 - 1.2
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>VOC</b>	< 3 %
<b>Viscosity</b>	> 2 cp

## 10. Chemical Stability & Reactivity Information

**Chemical stability**

Stable under recommended storage conditions.

**Incompatible materials**

Incompatible with strong bases and oxidizing agents.



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**Hazardous decomposition products**

Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Possibility of hazardous reactions**

Will not occur.

## 11. Toxicological Information

Not available.

## 12. Ecological Information

**Aquatic toxicity**

LC50/96h/Fathead minnows = 417 mg/L  
Static acute toxicity (trout), survival (100 mg/L) = 100%  
Static acute toxicity (trout), survival (10 mg/L) = 100%

**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**

<b>Proper shipping name</b>	Not applicable
<b>Hazard class</b>	Not applicable
<b>UN number</b>	None
<b>Packing group</b>	N/A
<b>Packaging exceptions</b>	None
<b>Packaging non bulk</b>	None
<b>Labels required</b>	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): Does not contain listed chemicals.

**CERCLA (Superfund) reportable quantity**  
None

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<b>Hazard categories</b>	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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**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.

**State regulations**

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

**Material name** C4912A

**Creation date** Apr 30, 2003

**Version number** 4

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## 16. Other Information

### HMIS® ratings

Health: 1  
Flammability: 0  
Physical hazard: 0

### NFPA ratings

Health: 1  
Flammability: 0  
Instability: 0

### Issue date

Feb 14 2009 3:32PM

### Revision

4

### Replaces sheet dated

Feb 5 2009 4:28PM

### 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

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