



# SAFETY DATA SHEET

## 1. Identification of the substance/preparation and of the company/undertaking

**Identification of the preparation** Q2321A

**Use of the preparation** Inkjet printing

**Company identification** Hewlett-Packard, Ltd.  
Cain Road, Amen Corner  
Bracknell, Berkshire, RG12 1HN

**Emergency telephone number**

**Poison Information Center** 0207771 5307

**Hewlett-Packard health effects line**

**(Toll-free within the US)** 1-800-457-4209  
**(Direct)** 1-503-494-7199

**General information telephone number**

1 344 36-0000  
**(Toll-free within the US)** 1-800-474-6836  
**(Direct)** 1-208-323-2551

**Date prepared** 28-Feb-2007

**SDS number** 114829

## 2. Composition/information on ingredients

Component/substance	CAS number	% by weight	EU number	EU classification
Water	7732-18-5	> 80	231-791-2	
2-pyrrolidone	616-45-5	< 5	210-483-1	Xi, R36/38
Aliphatic diol	Proprietary	< 5	Proprietary	

**Composition comments** This ink supply contains an aqueous ink formulation.  
This product has been evaluated using criteria specified in the EU Directives 67/548/EEC and 1999/45/EC, as amended.  
For the full text of the R phrases mentioned in this Section, see Section 16.

## 3. Hazards Identification

**Classification** Xn, R22, S13, 20, 23, 60

**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**

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

*Aliphatic diol*  
Contact with skin may result in irritation.

**Eye contact**

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

*Aliphatic diol*  
Contact with eyes may result in irritation.



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## Inhalation

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

*Aliphatic diol*  
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.

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.

### Other information

This black ink is not classified according to EU Directive 1999/45/EC.

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## 4. First aid measures

### First aid procedures

#### Eye

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

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.

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## 5. Fire-fighting measures

### Flash point and method

> 93.3 °C (> 200 °F); Pinsky-Martens Closed Cup

### Hazardous combustion products

Refer to section 10.

### Extinguishing media

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

### Unsuitable extinguishing media

None known.

### Unusual fire and explosion hazard

None known.

### Special firefighting procedures

None established.

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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.

### Procedures if material is released or spilled.

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.



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**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 limit values** Exposure limits have not been established for this product.

**Personal protective equipment**

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

**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

**Exposure guidelines** Use in a well ventilated area.

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## 9. Physical and chemical properties

**pH** 9 - 9.4

**Vapour pressure** Not determined

**Boiling point** Not determined

**Solubility** Soluble in water

**Specific gravity** 1 - 1.2

**VOC content** < 3 %

**Flash point** > 93.3 °C (> 200 °F)

**Viscosity** > 2 cp

**Vapour density** > 1 (Air = 1.0)

**Evaporation rate** Not determined

**Flammability** Not determined

**Oxidising properties** Not determined

**Colour** Black

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## 10. Stability and reactivity

**Stability** Stable under recommended storage conditions.

**Hazardous polymerisation** Will not occur.

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

**Incompatibility** Incompatible with strong bases and oxidizing agents.

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## 11. Toxicological information

This ink formulation has not been tested for toxicological effects.  
Refer to Section 3 for potential health effects and Section 4 for first aid measures.

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## 12. Ecological information

**Aquatic toxicity** LC50/96h/fathead minnows =>750 mg/L.

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## 13. Disposal considerations

**Disposal instructions** Dispose of in compliance with federal, state, and local regulations.

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## 14. Transport information

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



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## IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
Packaging exceptions	None.
Identification number (UN)	None.
Packing group	N/A

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## 15. Regulatory information

**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.

**EU label** This product does not require a label according to EU Directive 1999/45/EC.

### EU classification and labeling



Xn - Harmful

<b>Risk phrases</b>	R22	Harmful if swallowed.
<b>Safety phrases</b>	S13	Keep away from food, drink and animal feedingstuffs.
	S20	When using do not eat or drink.
	S23	Do not breathe vapour.
	S60	This material and its container must be disposed of as hazardous waste.

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## 16. Other information

**Manufacturer information** Hewlett-Packard Company  
1000 NE Circle Boulevard  
Corvallis, OR 97330-4239 US

**Ingredient risk phrase definition(s)** R22 Harmful if swallowed.  
R36/38 Irritating to eyes and skin.

**Other information** This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC.

**Issue date** Feb 28 2007 2:02PM

**Revision** 2

**Replaces sheet dated** Feb 9 2007 7:43AM

**Preparation and revision information** 3. Hazards identification: Routes of exposure

**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.



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## Explanation of abbreviations

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible exposure limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds