



# SAFETY DATA SHEET

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

**Identification of the preparation** C1816A  
**Selectability number** 16  
**Use of the preparation** Inkjet printing  
**Company identification** Hewlett-Packard, Ltd.  
Cain Road, Amen Corner  
Bracknell, Berkshire, RG12 1HN

**Emergency telephone number**  
**National Poisons Information** 020 7771 5307  
**Hewlett-Packard health effects line**  
**(Toll-free within the US)** 1-800-457-4209  
**(Direct)** 1-503-494-7199  
**General information telephone number** 1344 36-0000  
**HP Customer Care Line**  
**(Toll-free within the US)** 1-800-474-6836  
**(Direct)** 1-208-323-2551  
**Revision date** 12-Dec-2004  
**SDS number** 16482

## 2. Composition/information on ingredients

Component/substance	CAS number	% by weight	EU number	EU classification
<b>Black ink</b>				
Water	7732-18-5	< 70	231-791-2	
1,5-pentanediol	111-29-5	< 10	203-854-4	
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi; R36/38
Substituted naphthalenesulfonate salt #9	Proprietary	< 7.5	Proprietary	Xi, N; R41, 51/53
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41
<b>Cyan ink</b>				
Water	7732-18-5	< 80	231-791-2	
1,5-pentanediol	111-29-5	< 10	203-854-4	
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi; R36/38
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41
Substituted phthalocyanine salt #2	Proprietary	< 2.5	Proprietary	Xn, N; R22, 48/22, 51/53



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Component/substance	CAS number	% by weight	EU number	EU classification
<b>Magenta ink</b>				
Water	7732-18-5	< 80	231-791-2	
1,5-pentanediol	111-29-5	< 10	203-854-4	
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi; R36/38
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41

**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****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.

*Alkyldiol ethoxylate*

Contact with skin may result in severe irritation.

*Ethyl alkyldiol*

Contact with skin may result in mild irritation.

**Eye contact***1,5-pentanediol*

Contact with eyes may result in irritation.

*2-pyrrolidone*

Contact with eyes may result in irritation.

*Alkyldiol ethoxylate*

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

*Ethyl alkyldiol*

Contact with eyes may result in mild irritation.

*Substituted naphthalenesulfonate salt #9*

Contact with eyes may result in serious damage and irreversible eye coloration.  
Risk of serious damage to eyes.

**Inhalation***2-pyrrolidone*

Inhalation may result in respiratory irritation.



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## Ingestion

### *2-pyrrolidone*

Ingestion may result in nausea, vomiting and diarrhea.

### *Alkyldiol ethoxylate*

Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea.

### *Substituted phthalocyanine salt #2*

Harmful if swallowed.

## 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

Cyan ink:

Substituted phthalocyanine salt: Prolonged ingestion exposure may cause serious damage to health.

### 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 classified for health and environmental effects according to EU Directive 1999/45/EC with Xi; R41 and R52/53. The Cyan and magenta inks are 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); Pensky-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

<b>Personal precautions</b>	Wear appropriate personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
<b>Procedures if material is released or spilled</b>	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

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
<b>Storage</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

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## 8. Exposure controls / personal protection

<b>Exposure limit values</b>	Exposure limits have not been established for this product.
<b>Personal protective equipment</b>	
<b>General</b>	Use personal protective equipment to minimize exposure to skin and eye.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Exposure guidelines</b>	Use in a well ventilated area.

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## 9. Physical and chemical properties

<b>pH</b>	6 - 7
<b>Vapour pressure</b>	Not determined
<b>Boiling point</b>	Not determined
<b>Solubility</b>	Soluble in water
<b>Specific gravity</b>	1 - 1.2
<b>VOC content</b>	< 3 %
<b>Flash point</b>	> 93.3 °C (> 200 °F)
<b>Viscosity</b>	> 2 cp
<b>Vapour density</b>	> 1 (Air = 1.0)
<b>Evaporation rate</b>	Not determined
<b>Flammability</b>	Not determined
<b>Color</b>	Black, cyan, magenta

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## 10. Stability and reactivity

<b>Stability</b>	Stable under recommended storage conditions.
<b>Hazardous polymerisation</b>	Will not occur.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Incompatibility</b>	Incompatible with strong bases and oxidising agents.



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## 11. Toxicological information

Complete toxicity data are not available for this specific formulation  
Refer to Section 3 for potential health effects and Section 4 for first aid measures.

### Eye irritation

#### *Black ink*

Moderate irritant in rabbit (OECD 405)  
Classified for eye irritation according to EU Directives 67/548/EEC and 1999/45/EC.

## 12. Ecological information

### Aquatic toxicity

#### *Black ink*

LC50/96h/fathead minnows =< 400 mg/L  
Static acute toxicity (trout), survival (100 mg/L) = 87%  
Static acute toxicity (trout), survival (10 mg/L) = 93%

#### *Cyan ink*

LC50/96h/fathead minnows =< 400 mg/L  
Static acute toxicity (trout), survival (100 mg/L) = 100%  
Static acute toxicity (trout), survival (10 mg/L) = 100%

#### *Magenta ink*

LC50/96h/fathead minnows =< 400 mg/L  
Static acute toxicity (trout), survival (100 mg/L) = 97%  
Static acute toxicity (trout), survival (10 mg/L) = 97%

## 13. Disposal considerations

### Disposal instructions

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

## 14. Transport information

### General

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

### IATA

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

## 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/NDL), Australia, Japan, Philippines, South Korea, New Zealand, and China.



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## EU classification and labeling



Xi - Irritant

<b>Risk phrases</b>	R41 R52/53	Risk of serious damage to eyes. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Safety phrases</b>	S2 S25 S61	Keep out of the reach of children. Avoid contact with eyes. Avoid release to the environment. Refer to special instructions/safety data sheets.

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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)

R21/22	Harmful in contact with skin and if swallowed.
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

**Issue date** 12-Dec-2004

**Revision** 2

**Replaces sheet dated** 06-Oct-2004

### Preparation and revision information

13. Disposal considerations: Disposal instructions

Chemical Product and Company Identification: Alternate Trade Names - SKU Numbers

Composition / Information on Ingredients: Ingredient Extensions

### 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