



# SAFETY DATA SHEET

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

**Identification of the preparation** C4821A  
**Selectability number** 80  
**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** 13-Dec-2004  
**SDS number** 19005

## 2. Composition/information on ingredients

Component/substance	CAS number	% by weight	EU number	EU classification
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
Alkyldicarboxylic acid	Proprietary	< 7.5	Proprietary	Xi, R36/37/38
Substituted phthalocyanine salt #2	Proprietary	< 2.5	Proprietary	Xn, N, R22, 48/22, 51/53
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xi, 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.



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## 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.

### *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.

### *Alkyldicarboxylic acid*

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

### *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.

## Inhalation

### *2-pyrrolidone*

Inhalation may result in respiratory irritation.

### *Alkyldicarboxylic acid*

Inhalation may result in respiratory irritation.

## Ingestion

### *2-pyrrolidone*

Ingestion may result in nausea, vomiting and diarrhea.

### *Alkyldicarboxylic acid*

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

### *Alkyldiol ethoxylate*

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

### *Substituted phthalocyanine salt #2*

Harmful if swallowed.



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## 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

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 Cyan ink is classified for environmental effects according to EU Directive 1999/45/EC with R52/53.

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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

### 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

<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>	3.75 - 4.25
<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>Oxidising properties</b>	Not determined
<b>Color</b>	Cyan

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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

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

<b>Aquatic toxicity</b>	LC50/96h/fathead minnows =< 400 mg/L Static acute toxicity (trout), survival (100 mg/L) = 90% Static acute toxicity (trout), survival (10 mg/L) = 100%
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## 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/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

### EU classification and labeling

**Risk phrases** R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

## 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.
R36/37/38	Irritating to eyes, respiratory system and skin.
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** 13-Dec-2004

**Revision** 2

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



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## Preparation and revision information

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

Composition / Information on Ingredients: Ingredient Extensions

Physical & Chemical Properties: Physical & Chemical Properties

## 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