



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>Identification of the substance/preparation</b>	C3849A
<b>Use of the preparation</b>	Inkjet printing
<b>Revision Date</b>	26-Jun-2008
<b>CAS #</b>	Mixture
<b>Company identification</b>	Hewlett-Packard, Ltd. Cain Road, Amen Corner Bracknell, Berkshire, RG12 1HN
<b>Emergency telephone number</b>	
<b>Poison Information Center</b>	0207771 5307
<b>Hewlett-Packard health effects line</b>	
<b>(Toll-free within the US)</b>	1-800-457-4209
<b>(Direct)</b>	1-503-494-7199
<b>General information telephone number</b>	
	1 344 36-0000
<b>(Toll-free within the US)</b>	1-800-474-6836
<b>(Direct)</b>	1-208-323-2551
<b>Email</b>	hpcustomerinquiries@hp.com

## 2. HAZARDS IDENTIFICATION

<b>Classification</b>	R52/53
<b>Acute health effects</b>	Any potential hazards are presumed to be due to exposure to the components.
<b>Skin contact</b>	
	<i>1,5-pentandiol</i> Contact with skin may result in irritation.
	<i>2-pyrrolidone</i> Contact with skin may result in irritation.
	<i>Alkyldiol ethoxylate</i> Contact with skin may result in severe irritation.
	<i>Ethyl alkyldiol</i> Contact with skin may result in mild irritation.
	<i>Metal nitrate #1</i> Contact with skin may result in irritation.
	<i>Metal nitrate #2</i> Contact with skin may result in irritation.
	<i>Substituted naphthalenesulfonate salt #10</i> May cause sensitization by skin contact.
	<i>Substituted triphenylmethane salt #1</i> Contact with skin may result in irritation.



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## 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.

### *Metal nitrate #1*

Contact with eyes may result in irritation.

### *Metal nitrate #2*

Contact with eyes may result in irritation.

### *Substituted naphthalenesulfonate salt #10*

Risk of serious damage to eyes.

### *Substituted triphenylmethane salt #1*

Contact with eyes may result in irritation.

## Inhalation

### *2-pyrrolidone*

Inhalation may result in respiratory irritation.

### *Metal nitrate #1*

Inhalation may result in respiratory irritation.

### *Metal nitrate #2*

Inhalation may result in respiratory irritation.

## Ingestion

### *2-pyrrolidone*

Ingestion may result in nausea, vomiting and diarrhea.

### *Alkyldiol ethoxylate*

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

### *Arüülasopürasoolsulfonaadi sool 1*

Toxic if swallowed.

### *Diethylene glycol*

Harmful if swallowed. May cause kidney and liver damage. May depress the central nervous system.

### *Metal nitrate #1*

Contains nitrate salts, may cause methemoglobinemia.

### *Metal nitrate #2*

Contains nitrate salts, may cause methemoglobinemia.

### *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.



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## Chronic health effects

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

Yellow ink:  
Arylazopyrazolesulfonate 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.

## Physical hazards

Not classified as a physical hazard.

## Health hazards

Not classified as a health hazard.

## Environmental hazards

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## Other information

This Cyan ink is classified for environmental effects according to EU Directive 1999/45/EC with R 52/53. The magenta and yellow inks are not classified according to EU Directive 1999/45/EC.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight	EU number	EU classification
<b>Cyan ink</b>				
Water	7732-18-5	> 60	231-791-2	
1,5-pentandiol	111-29-5	< 10	203-854-4	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	R36/38
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
Metal nitrate #2	Proprietary	< 7.5	Proprietary	F; R36/37/38, 8
Substituted phthalocyanine salt #2	Proprietary	< 5	Proprietary	Xn, N; R22, 48/22, 51/53
Alkyldiol ethoxylate	Proprietary	< 5	Proprietary	Xn, N; R21/22, 38, 41, 51, 51/53
Substituted triphenylmethane salt #1	Proprietary	< 2.5	Proprietary	
<b>Magenta ink</b>				
Water	7732-18-5	> 60	231-791-2	
1,5-pentandiol	111-29-5	< 10	203-854-4	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	R36/38
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
Metal nitrate #2	Proprietary	< 7.5	Proprietary	F; R36/37/38, 8
Substituted naphthalenesulfonate salt #10	Proprietary	< 5	Proprietary	Xi; R41, 43, 52/53
Alkyldiol ethoxylate	Proprietary	< 5	Proprietary	Xn, N; R21/22, 38, 41, 51, 51/53
<b>Yellow ink</b>				
Water	7732-18-5	> 70	231-791-2	
Ethyl alkyldiol	Proprietary	< 10	Proprietary	
Metal nitrate #1	Proprietary	< 7.5	Proprietary	Xi, O; R36/38, 8
2-pyrrolidone	616-45-5	< 5	210-483-1	R36/38
Diethylene glycol	111-46-6	< 5	203-872-2	Xn; R22
Arüülasopürasoolsulfonaadi sool 1	Proprietary	< 5	Proprietary	T; R25, 52/53
Alkyldiol ethoxylate	Proprietary	< 5	Proprietary	Xn, N; R21/22, 38, 41, 51, 51/53

## 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.



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## 4. FIRST AID MEASURES

<b>Inhalation</b>	Remove to fresh air. If symptoms persist, get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.

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## 5. FIRE-FIGHTING MEASURES

<b>Flash point and method</b>	> 93.3 °C (> 200 °F); Pinsky-Martens Closed Cup
<b>Suitable extinguishing media</b>	Dry chemical, CO <sub>2</sub> , water spray or regular foam.
<b>Extinguishing media which must not be used for safety reasons</b>	None known.
<b>Unusual fire &amp; explosion hazards</b>	None known.
<b>Hazardous combustion products</b>	Refer to section 10.
<b>Specific methods</b>	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>Containment procedures</b>	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.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.

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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>Additional exposure data</b>	Exposure limits have not been established for this product.
<b>Engineering measures</b>	Provide adequate ventilation.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	For use other than intended use (such as in the event of a large spills), goggles and respirators may be required
<b>Eye protection</b>	Not required under intended use.
<b>Skin and body protection</b>	Protected gloves not required under intended use.
<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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Not available
<b>Physical state</b>	Liquid.



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<b>Form</b>	Not available
<b>Colour</b>	Cyan, magenta, yellow
<b>Odour</b>	Not available
<b>Odour threshold</b>	Not available
<b>pH</b>	6.1 - 8.4
<b>Boiling point</b>	Not determined
<b>Flash point</b>	> 93.3 °C (> 200 °F); Pensky-Martens Closed Cup
<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>Vapour pressure</b>	Not determined
<b>Relative density</b>	Not available
<b>Solubility in water</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Viscosity</b>	> 2 cp
<b>Vapour density</b>	> 1 (Air = 1.0)
<b>Evaporation rate</b>	Not determined
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Specific gravity</b>	1 - 1.2
<b>VOC</b>	< 3 %

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## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Materials to avoid</b>	Not available
<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>Hazardous polymerisation</b>	Will not occur.



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## 11. TOXICOLOGICAL INFORMATION

### Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s		
Water	7732-18-5	Oral LD50 Rat: >90 mL/kg
Toxicology Data - Selected LD50s and LC50s		
1,5-pentanediol	111-29-5	Oral LD50 Rat: 2 g/kg; Dermal LD50 Rabbit: >20000 mg/kg
Toxicology Data - Selected LD50s and LC50s		
Metal nitrate #2	Proprietary	Oral LD50 Rat: 5440 mg/kg
Toxicology Data - Selected LD50s and LC50s		
Arüülasopürasoolsulfonaadi sool 1	Proprietary	Oral LD50 Rat: 81 mg/kg

### Oral toxicity

#### *Magenta ink*

Not classified for Acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.

#### *Yellow ink*

LD50/oral/rat >2500mg/kg (OECD 423)

Not classified for Acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.

### Eye irritation

#### *Magenta ink*

Mild irritant in rabbit (OECD 405)

Not classified for eye irritation according to EU Directive 67/548/EEC and 1999/45/EC.

### Sensitisation

#### *Magenta ink*

Non-sensitizer in guinea pig (OECD 406) (OECD 406)

Not classified for skin sensitisation according to EU Directive 67/548/EEC and 1999/45/EC.

### Further 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.

## 12. ECOLOGICAL INFORMATION

### Aquatic toxicity

#### *Cyan ink*

LC50/96h/Fathead minnows =< 400 mg/L

Static acute toxicity (trout), survival (100 mg/L) = 67%

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) = 100%

Static acute toxicity (trout), survival (10 mg/L) = 100%

#### *Yellow ink*

LC50/96h/Fathead minnows =< 400 mg/L

Static acute toxicity (trout), survival (100 mg/L) = 23%

Static acute toxicity (trout), survival (10 mg/L) = 93%

## 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>.

### Waste from residues / unused products

Not available



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**Contaminated packaging** Not available

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## 14. TRANSPORT INFORMATION

### ADR

Not regulated as hazardous goods.

### IMDG

Not regulated as hazardous goods.

### 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.

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

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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.

### Labelling

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

**S-phrases(s)** S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

**EC Label** Contains Reactive Red dye. May produce an allergic reaction.

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## 16. OTHER INFORMATION

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

**List of relevant R phrases** R52/53 Harmful 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.

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**Issue date** 26-Jun-2008

**Revised sections** 3. Hazards identification: Other information  
8. Exposure controls/personal protection: Respiratory



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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