



SAFETY DATA SHEET

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

Identification of the preparation 51641 Series

Selectability number 41

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 16674

2. Composition/information on ingredients

Component/substance	CAS number	% by weight	EU number	EU classification
Cyan ink				
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
Metal nitrate #2	Proprietary	< 7.5	Proprietary	Xi, O; R36/37/38, 8
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
Magenta ink				
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
Metal nitrate #2	Proprietary	< 7.5	Proprietary	Xi, O; R36/37/38, 8
Substituted naphthalenesulfonate salt #10	Proprietary	< 2.5	Proprietary	Xi; R41, 43, 52/53
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41



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Component/substance	CAS number	% by weight	EU number	EU classification
Yellow ink				
Water	7732-18-5	< 80	231-791-2	
Ethyl alkyldiol	Proprietary	< 10	Proprietary	
Metal nitrate #1	Proprietary	< 7.5	Proprietary	Xi, O; R36/38, 8
Diethylene glycol	111-46-6	< 5	203-872-2	Xn; R22
2-pyrrolidone	616-45-5	< 5	210-483-1	Xi; R36/38
Arylazopyrazolesulfonate salt #1	Proprietary	< 5	Proprietary	T; R25, 52/53
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.

Metal nitrate #1

Contact with skin may result in irritation.

Metal nitrate #2

Contact with skin may result in irritation.

Substituted naphthalenesulfonate salt #10

May cause sensitisation by skin contact.



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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.

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.



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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.

Arylazopyrazolesulfonate salt #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.

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.

Other information

This Cyan ink is classified for environmental effects according to EU Directive 1999/45/EC with R52-53. The magenta and yellow 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.

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, 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.
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.

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

United Kingdom - Occupational Exposure Standards - TWAs

Diethylene glycol 111-46-6 23 ppm TWA; 101 mg/m³ TWA

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	7.8 - 8.6
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
Color	Cyan, magenta, yellow

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 oxidising agents.

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

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

Oral toxicity

Yellow ink
LD50/oral/rat >2500mg/kg (OECD 401)
Not classified for acute oral toxicity according to EU Directive 67/548/EEC and 1999/45/EC.



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12. Ecological information

Aquatic toxicity

Cyan ink

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) = 23%

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) = 20%

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

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

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 label

Contains Reactive Red dye. May produce an allergic reaction.

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



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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.
R25	Toxic 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.
R43	May cause sensitisation by skin contact.
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.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R8	Contact with combustible material may cause fire.

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

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.



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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