



# SAFETY DATA SHEET

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

**Identification of the preparation** 51605R Rev B

**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** 19901

## 2. Composition/information on ingredients

Component/substance	CAS number	% by weight	EU number	EU classification
Water	7732-18-5	< 50	231-791-2	
2-pyrrolidone	616-45-5	< 30	210-483-1	Xi, R36/38
Ethylene glycol	107-21-1	< 25	203-473-3	Xn, R22
Alkyldiol	Proprietary	< 7.5	Proprietary	
Arylazopyrazolesulfonate salt #1	Proprietary	< 2.5	Proprietary	T, R25, 52/53

**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.

## 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**

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

*Alkyldiol*  
Contact with skin may result in irritation.



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## Eye contact

### *2-pyrrolidone*

Contact with eyes may result in irritation.

### *Alkyldiol*

Contact with eyes may result in irritation.

## Inhalation

### *2-pyrrolidone*

Inhalation may result in respiratory irritation.

### *Alkyldiol*

Inhalation may result in respiratory irritation.

## Ingestion

### *2-pyrrolidone*

Ingestion may result in nausea, vomiting and diarrhea.

### *Arylazopyrazolesulfonate salt #1*

Toxic if swallowed.

### *Ethylene glycol*

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

## 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

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 red 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

<b>Flash point and method</b>	> 93.3 °C (> 200 °F); Pensky-Martens Closed Cup
<b>Hazardous combustion products</b>	Refer to section 10.
<b>Extinguishing media</b>	Dry chemical, CO <sub>2</sub> , water spray or regular foam.
<b>Unsuitable extinguishing media</b>	None known.
<b>Unusual fire and explosion hazard</b>	None known.
<b>Special firefighting procedures</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>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.	
United Kingdom - Occupational Exposure Standards - TWAs		
Ethylene glycol	107-21-1	10 mg/m <sup>3</sup> TWA (particulate); 52 mg/m <sup>3</sup> TWA (vapour)
<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>	7 - 7.4
<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)



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<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>	Red

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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.

<b>Dermal irritation</b>	Non - irritant in rabbit (OECD 404) Not classified for dermal irritation according to EU Directive 67/548/EEC and 1999/45/EC.
<b>Eye irritation</b>	Non - irritant in rabbit (OECD 405) Not classified for eye irritation according to EU Directive 67/548/EEC and 1999/45/EC.
<b>Oral toxicity</b>	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

<b>Aquatic toxicity</b>	LC50/96h/fathead minnows => 750 mg/L
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## 13. Disposal considerations

<b>Disposal instructions</b>	Dispose of in compliance with federal, state, and local regulations.
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## 14. Transport information

<b>General</b>	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.
<b>IATA</b>	
<b>Proper shipping name</b>	Not applicable
<b>Hazard class</b>	Not applicable
<b>Packaging exceptions</b>	None
<b>Identification number (UN)</b>	None
<b>Packing group</b>	N/A



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## 15. Regulatory information

<b>International regulations</b>	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.
<b>EU label</b>	This product does not require a label according to EU Directive 1999/45/EC.

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## 16. Other information

<b>Manufacturer information</b>	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis, OR 97330-4239 US
<b>Ingredient risk phrase definition(s)</b>	R22 Harmful if swallowed. R25 Toxic if swallowed. R36/38 Irritating to eyes and skin. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Other information</b>	This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC.
<b>Issue date</b>	13-Dec-2004
<b>Revision</b>	1
<b>Disclaimer</b>	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