



# Safety Data Sheet

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

Identification of the substance/preparation	51644C
Use of the preparation	Inkjet printing
CAS #	Mixture
Company identification	Hewlett-Packard Bulgaria Business Center EXPO 2000 Vaptzarov Blvd. Sofia 1407, Bulgaria Telephone +359 2 960-1941  Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomerinquiries@hp.com Poison Information Centre telephone number

## 2. HAZARDS IDENTIFICATION

Classification	R52/53
Acute health effects	Any potential hazards are presumed to be due to exposure to the components.
Skin contact	<i>1,5-pentanediol</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 #2</i> Contact with skin may result in irritation.
Eye contact	<i>1,5-pentanediol</i> Contact with eyes may result in irritation. <i>2-pyrrolidone</i> Contact with eyes may result in irritation. <i>Alkyldiol ethoxylate</i> Contact can cause moderate to severe irritation and possible injury to the eyes. <i>Ethyl alkyldiol</i> Contact with eyes may result in mild irritation. <i>Metal nitrate #2</i> Contact with eyes may result in irritation.
Inhalation	<i>2-pyrrolidone</i> Inhalation may result in respiratory irritation. <i>Metal nitrate #2</i> 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.

### 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

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.

### 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 R52/53

## 3. 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	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi, R36/38
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
Metal nitrate #2	Proprietary	< 7.5	Proprietary	Xi, O, R36/37/38, 8
Substituted phthalocyanine salt #2	Proprietary	< 2.5	Proprietary	Xn, N, R22, 48/22, 51/53

### Composition comments

This ink supply contains an aqueous ink formulation.  
This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard). The components of this product have been evaluated in accordance with the hazard criteria of the Canada Controlled Products Regulations. This product was evaluated according to the criteria of the National Occupational Health and Safety Commission (NOHSC) Australia. 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.

## 4. FIRST AID MEASURES

### Inhalation

Remove to fresh air. If symptoms persist, get medical attention.

### Skin contact

Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

### Eye contact

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.

### 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

### Suitable extinguishing media

Dry chemical, CO2, water spray or regular foam.



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Extinguishing media which must not be used for safety reasons	None known.
Unusual fire & explosion hazards	None known.
Hazardous combustion products	Refer to section 10.
Specific methods	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.
Methods for cleaning up	Soak up with inert absorbent material.
Containment procedures	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.

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## 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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional exposure data	Exposure limits have not been established for this product.
Personal protective equipment	
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
Eye protection	Not required under intended use.
General	Use personal protective equipment to minimize exposure to skin and eye.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Not available.
Physical state	Liquid.
Form	Not available.
Color	Cyan
Odor	Not available.
Odour threshold	Not available.
pH	7.8 - 8.6
Boiling point	Not determined
Flash point	> 93.3 °C (> 200 °F); Pensky-Martens Closed Cup
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not determined
Vapor pressure	Not determined
Relative density	Not available.
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not available.



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Viscosity	> 2 cp
Vapor density	> 1 (air = 1.0)
Evaporation rate	Not determined
Melting point	Not available.
Freezing point	Not available.
Auto-ignition temperature	Not available.
Specific gravity	1 - 1.2
VOC	< 3 %

## 10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Materials to avoid	Incompatible with strong bases and oxidizing agents.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Hazardous polymerization	Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Further 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

Aquatic toxicity	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%
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## 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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
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## 14. TRANSPORT INFORMATION

### ADR

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

### IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
UN number	None
Packing group	N/A
Packaging exceptions	None
Packaging non bulk	None
Labels required	None

General	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID. Not a regulated article under Israeli Transport Services Law and Regulation 1997, United States DOT, IATA, ADR, IMDG or RID.
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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>Labeling</b>	
<b>Contains</b>	1,5-pentanediol, 2-pyrrolidone, Ethyl alkylidol, Metal nitrate #2, Substituted phthalocyanine salt #2, Water
<b>R-phrases(s)</b>	R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>S-phrases(s)</b>	S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

## 16. OTHER INFORMATION

<b>Manufacturer information</b>	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis, OR 97330-4239 US (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209
<b>List of relevant R phrases</b>	R8 Contact with combustible material may cause fire. 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. 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>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.
<b>Issue date</b>	16-May-2009



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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