



# Material Safety Data Sheet

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material name	51644C
Recommended use	Inkjet printing
CAS #	Mixture
Company identification	Hewlett-Packard Australia Pty Ltd 31-41 Joseph Street Blackburn Victoria 3130 Australia Telephone + 61 3 8877-8000  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 131 126 (24 hours)

## 2. HAZARDS IDENTIFICATION

Classification	R52/53	
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.
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

Australia: Non-hazardous substance. Non-dangerous goods.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight
Water	7732-18-5	< 70
1,5-pentanediol	111-29-5	< 10
2-pyrrolidone	616-45-5	< 7.5
Ethyl alkyldiol	Proprietary	< 7.5
Metal nitrate #2	Proprietary	< 7.5
Substituted phthalocyanine salt #2	Proprietary	< 2.5
Composition comments	This ink supply contains an aqueous ink formulation. This product was evaluated according to the criteria of the National Occupational Health and Safety Commission (NOHSC) Australia.	

## 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.
Extinguishing media which must not be used for safety reasons	None known.
Unusual fire & explosion hazards	None known.



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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.

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.

Methods for cleaning up

Soak up with inert absorbent material.

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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.

Engineering measures

Provide adequate ventilation.

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.

Skin and body protection

Protected gloves 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

Vapor pressure

Not determined

Vapor density

> 1 (air = 1.0)

Boiling point

Not determined

Freezing point

Not available.

Melting point

Not available.

Solubility (water)

Soluble in water

Specific gravity

1 - 1.2

Relative density

Not available.

Flash point

> 93.3 °C (> 200 °F); Pensky-Martens Closed Cup

Flammability limits in air, upper, % by volume

Not available.

Flammability limits in air, lower, % by volume

Not determined

Auto-ignition temperature

Not available.

VOC

< 3 %



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Evaporation rate	Not determined
Viscosity	> 2 cp
Flammability	Not determined

## 10. STABILITY AND REACTIVITY

Chemical stability	Stable under recommended storage conditions.
Incompatible materials	Not available.
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

Toxicological information	Complete toxicity data are not available for this specific formulation
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.

## 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

### ADG

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.

## 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.
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### Australia HVIC: Listed substance

Ethyl alkyl diol (Proprietary) Listed.



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## 16. OTHER INFORMATION

<b>Manufacturer</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 the NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets", 2003.
<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>Revision date</b>	16-May-2009
<b>This data sheet contains changes from the previous version in section(s):</b>	HAZARDS IDENTIFICATION: Routes of exposure EXPOSURE CONTROLS/PERSONAL PROTECTION: Respiratory protection
<b>Explanation of abbreviations</b>	
<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