SAFETY DATA SHEET

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

Identification of the substance/preparation	C3845A
Use of the preparation	Inkjet printing
Revision Date	26-Jun-2008
CAS #	Mixture
Company identification	Hewlett-Packard, Ltd. Cain Road, Amen Corner Bracknell, Berkshire, RG12 1HN
Emergency telephone number	
Poison Information Center	0207771 5307
Hewlett-Packard health effects line	
(Toll-free within the US)	1-800-457-4209
(Direct)	1-503-494-7199
General information telephone number	
	1 344 36-0000
(Toll-free within the US)	1-800-474-6836
(Direct)	1-208-323-2551
Email	hpcustomerinquiries@hp.com

2. HAZARDS IDENTIFICATION

Acute health effects Any potential hazards are presumed to be due to exposure to the components.

Skin contact

Alkyldiol
Contact with skin may result in irritation.

Alkyldiol ethoxylate
Contact with skin may result in severe irritation.

Eye contact

1-Butanol
Risk of serious damage to eyes. Contact with eyes may result in irritation.

Alkyldiol
Contact with eyes may result in irritation.

Alkyldiol ethoxylate
Contact can cause moderate to severe irritation and possible injury to the eyes.

Inhalation

1-Butanol
Inhalation may result in respiratory irritation. Inhalation may cause drowsiness or dizziness.

Alkyldiol
Inhalation may result in respiratory irritation.

Ingestion

1-Butanol
Harmful if swallowed.

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

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

Black ink:
None known.

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

Cyan light ink:
None known.

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

Not classified as an environmental hazard.

Other information

This black ink is classified for environmental effects according to EU Directive 1999/45/EC with R52/53. The Cyan and cyan light 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
Black ink				
Water	7732-18-5	> 80	231-791-2	
Alkyldiol	Proprietary	< 10	Proprietary	
1-Butanol	71-36-3	< 2.5	200-751-6	Xn; R10, 22, 37/38, 41, 67
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn, N; R21/22, 38, 41, 51, 51/53
Dark cyan ink				
Water	7732-18-5	> 80	231-791-2	
Alkyldiol	Proprietary	< 10	Proprietary	
1-Butanol	71-36-3	< 2.5	200-751-6	Xn; R10, 22, 37/38, 41, 67
Substituted phthalocyanine salt #2	Proprietary	< 2.5	Proprietary	Xn, N; R22, 48/22, 51/53
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn, N; R21/22, 38, 41, 51, 51/53
Light cyan ink				
Water	7732-18-5	> 80	231-791-2	
Alkyldiol	Proprietary	< 10	Proprietary	
1-Butanol	71-36-3	< 2.5	200-751-6	Xn; R10, 22, 37/38, 41, 67
Alkyldiol ethoxylate	Proprietary	< 2.5	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.

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.
Hazardous combustion products	Refer to section 10.
Specific methods	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.
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.

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

Additional exposure data Exposure limits have not been established for this product.

United Kingdom - Workplace Exposure Limits (WELs) - STELs

1-Butanol	71-36-3	50 ppm STEL; 154 mg/m3 STEL

Engineering measures Provide adequate ventilation.

Personal protective equipment

Respiratory protection	For use other than intended use (such as in the event of a large spills), 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Not available
Physical state	Liquid.
Form	Not available
Colour	Black, cyan, cyan light
Odour	Not available
Odour threshold	Not available
pH	6.5 - 7
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
Vapour pressure	Not determined
Relative density	Not available
Solubility in water	Soluble in water
Partition coefficient (n-octanol/water)	Not available
Viscosity	> 2 cp
Vapour 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	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 polymerisation	Will not occur.

11. TOXICOLOGICAL INFORMATION

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

1-Butanol	71-36-3	Inhalation LC50 Rat: >17.7 mg/L/4H; Inhalation LC50 Rat: 8000 ppm/4H; Oral LD50 Rat: 790 mg/kg; Dermal LD50 Rabbit: 3400 mg/kg

Toxicology Data - Selected LD50s and LC50s

Water	7732-18-5	Oral LD50 Rat: >90 mL/kg

Eye irritation

Black ink
Non - irritant in rabbit (OECD 405)
Not classified for eye irritation 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 aide measures.

12. ECOLOGICAL INFORMATION

Aquatic toxicity

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

Dark cyan 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%

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

Contaminated packaging

Not available

14. TRANSPORT INFORMATION

ADR

Not regulated as hazardous goods.

IMDG

Not regulated as hazardous goods.

IATA

Proper shipping name	not applicable
Hazard class	not applicable
UN number	None.
Packing group	N/A
Packaging exceptions	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.

EC Label This product does not require a label according to EU Directive 1999/45/EC.

16. OTHER INFORMATION

Manufacturer information

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

List of relevant R phrases

United Kingdom - Workplace Exposure Limits (WELs) - STELs

1-Butanol	71-36-3	50 ppm STEL; 154 mg/m3 STEL

Other information This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC.

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.

Issue date 26-Jun-2008

Revised sections

3. Hazards identification: Routes of exposure
3. Hazards identification: Other information
8. Exposure controls/personal protection: Respiratory

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