



MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Material name	C1816A
Use of the preparation	Inkjet printing
Version #	03
Revision date	18-Mar-2008
CAS #	Mixture
Manufacturer information	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis, OR 97330-4239 US
Hewlett-Packard health effects line	
(Toll-free within the US)	1-800-457-4209
(Direct)	1-503-494-7199
General information telephone number	
HP Customer Care Line	1-800-474-6836
(Toll-free)	1-800-474-6836
(Direct)	1-208-323-2551
Date prepared	Mar 18, 2008
MSDS number	264167

2. 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.

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.

Substituted naphthalenesulfonate salt #9
Contact with eyes may result in serious damage and irreversible eye coloration.
Risk of serious damage to eyes.



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Inhalation

2-pyrrolidone

Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone

Ingestion may result in nausea, vomiting and diarrhea.

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

Cyan ink:

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.

3. Composition / Information on Ingredients

Component/Substance	CAS Number	% By Weight
Black ink		
Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Substituted naphthalenesulfonate salt #9	Proprietary	< 7.5
Alkyldiol ethoxylate	Proprietary	< 5
Cyan ink		
Water	7732-18-5	> 70
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Alkyldiol ethoxylate	Proprietary	< 5
Substituted phthalocyanine salt # 2	Proprietary	< 2.5
Magenta ink		
Water	7732-18-5	> 70
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Alkyldiol ethoxylate	Proprietary	< 5

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).



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4. First Aid Measures

First aid procedures

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.
Skin contact	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	> 200 °F (> 93.3 °C); Pensky-Martens Closed Cup
Hazardous combustion products	Refer to section 10.
Flammable properties	None known.
Extinguishing media	
Suitable extinguishing media	Dry chemical, CO ₂ , water spray or regular foam.
Unsuitable extinguishing media	None known.
Unusual fire and explosion hazard	None known.
Protection of firefighters	
Specific hazards arising from the chemical	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.
Methods for containment	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.
Other information	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 guidelines	Exposure limits have not been established for this product.
Personal protective equipment	
General	Use personal protective equipment to minimize exposure to skin and eye.



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General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Color	Black, cyan, magenta
Odor threshold	Not available
Physical state	Liquid.
pH	6 - 7
Melting point	Not available
Freezing point	Not available
Boiling point	Not determined
Flash point	> 200 °F (> 93.3 °C); Pensky-Martens Closed Cup
Evaporation rate	Not determined
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
Vapor density	> 1 (air = 1.0)
Specific gravity	1 - 1.2
Relative density	Not available
Solubility in water	Soluble in water
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
VOC	< 3 %
Viscosity	> 2 cp

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under recommended storage conditions.
Incompatible materials	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.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Eye irritation

Black ink
Moderate irritant in rabbit (OECD 405)
Classified for eye irritation according to EU Directives 67/548/EEC and 1999/45/EC.



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12. Ecological Information

Aquatic toxicity

Black ink

LC50/96h/Fathead minnows =< 400 mg/L

Static acute toxicity (trout), survival (100 mg/L) = 87%

Static acute toxicity (trout), survival (10 mg/L) = 93%

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%

Magenta ink

LC50/96h/Fathead minnows =< 400 mg/L

Static acute toxicity (trout), survival (100 mg/L) = 97%

Static acute toxicity (trout), survival (10 mg/L) = 97%

Persistence and degradability Not available

13. Disposal Considerations

Disposal instructions Dispose of in compliance with federal, state, and local regulations.

14. Transportation Information

Department of Transportation (DOT) Requirements

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

15. Regulatory Information

US federal regulations US TSCA 12(b): Does not contain listed chemicals.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

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.

State regulations

Material name C1816A

Creation date Jul 02, 2003

Version number 4

MSDS US

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16. Other Information

HMIS® ratings

Health: 1
Flammability: 1
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 1
Instability: 0

Issue date

Mar 18 2008 11:08AM

Revision

3

Replaces sheet dated

Jan 9 2006 2:30PM

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.

MSDS sections updated

3. Hazards Identification: Routes of exposure

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