



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Material name C4812A
Product use Inkjet printing
Version # 04
Revision date 02-14-2009
CAS # Mixture
Company identification Hewlett-Packard (Canada) Co.
5150 Spectrum Way
Mississauga, Ontario
Canada
L4W 5G1
Telephone 1-800-387-3867

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

Date prepared Feb 14, 2009

2. HAZARDS IDENTIFICATION

Emergency Overview Contact with skin and eyes may result in irritation.

Acute health effects

Skin contact

- 1,5-pentanediol*
Contact with skin may result in irritation.
- 2-pyrrolidone*
Contact with skin may result in irritation.
- Alkoxy ether phosphate*
Contact with skin may result in severe irritation.
- Alkyldicarboxylic acid*
Contact with skin may result in irritation.
- Tetraethylene glycol*
Contact with skin may result in irritation.

Eye contact

- 1,5-pentanediol*
Contact with eyes may result in irritation.
- 2-pyrrolidone*
Contact with eyes may result in irritation.
- Alkoxy ether phosphate*
Contact with eyes may result in irritation.
- Alkyldicarboxylic acid*
Contact can cause moderate to severe irritation and possible injury to the eyes.
- Substituted xanthylum salt #1*
Contact with eyes may result in mild irritation.
- Tetraethylene glycol*
Contact with eyes may cause irritation.



MATERIAL SAFETY DATA SHEET

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.
Alkoxy ether phosphate
Inhalation may result in respiratory irritation.
Alkyldicarboxylic acid
Inhalation may result in respiratory irritation.
Tetraethylene glycol
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.
Alkoxy ether phosphate
Irritating to mouth, throat, and stomach.
Alkyldicarboxylic acid
Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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.

Chronic health effects

Complete toxicity data are not available for this specific formulation.

Carcinogenicity

None known.

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
Water	7732-18-5	< 100
1,5-pentanediol	111-29-5	< 30
2-pyrrolidone	616-45-5	< 7
Alkyldicarboxylic acid	Proprietary	< 7
Tetraethylene glycol	112-60-7	< 5
Substituted xanthylum salt #1	Proprietary	< 1.5

Composition comments This ink supply contains an aqueous ink formulation. The components of this product have been evaluated in accordance with the hazard criteria of the Canada Controlled Products Regulations.

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

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

Hazardous combustion products

Refer to section 10.

Flammable properties

None known.



MATERIAL SAFETY DATA SHEET

Extinguishing media

Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None known.

Unusual fire and explosion hazard 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.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color Magenta

Odour threshold Not available.

Physical state Liquid.

pH 3.8 - 4.2

Melting point Not available.

Freezing point Not available.

Boiling point Not determined

Flash point > 93.3 °C (> 200 °F); 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 (water) Soluble in water



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MATERIAL SAFETY DATA SHEET

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

Not available.

12. ECOLOGICAL INFORMATION

Aquatic toxicity	LC50/96h/Fathead minnows =417 mg/L Static acute toxicity (trout), survival (100 mg/L) = 100% Static acute toxicity (trout), survival (10 mg/L) = 100%
Persistence and degradability	Not available.

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 .
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14. TRANSPORT INFORMATION

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

WHMIS status	Non-controlled
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16. OTHER INFORMATION

Manufacturer information	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
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HMIS® ratings

Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 0
Instabiity: 0

Issue date

Feb 14 2009 3:32PM

Revision

4

Replaces sheet dated

Feb 5 2009 4:28PM

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.

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