



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	C4905A
Use of the preparation	Inkjet printing
Version #	01
Revision date	12-23-2008
CAS #	Mixture
Company identification	Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501 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
Date prepared	Dec 23, 2008
MSDS number	323074

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-(2-hydroxyethyl)-2-pyrrolidone
Contact with skin may result in irritation.

2-pyrrolidone
Contact with skin may result in irritation.

Aliphatic diol
Contact with skin may result in irritation.

Alkoxy ether phosphate
Contact with skin may result in severe irritation.

Tetraethylene glycol
Contact with skin may result in irritation.

Yellow pigment
Contact with skin may result in irritation.

Eye contact

1-(2-hydroxyethyl)-2-pyrrolidone
Contact with eyes may result in irritation.

2-pyrrolidone
Contact with eyes may result in irritation.

Aliphatic diol
Contact with eyes may result in irritation.

Alkoxy ether phosphate
Contact with eyes may result in irritation.

Tetraethylene glycol
Contact with eyes may cause irritation.

Yellow pigment
Contact with eyes may result in irritation.



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Inhalation

1-(2-hydroxyethyl)-2-pyrrolidone
Inhalation may result in respiratory irritation.

2-pyrrolidone
Inhalation may result in respiratory irritation.

Aliphatic diol
Inhalation may result in respiratory irritation.

Alkoxy ether phosphate
Inhalation may result in respiratory irritation.

Tetraethylene glycol
Inhalation may result in respiratory irritation.

Ingestion

1-(2-hydroxyethyl)-2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Alkoxy ether phosphate
Irritating to mouth, throat, and stomach.

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

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.

3. Composition / Information on Ingredients

Component/substance	CAS number	% by weight
Water	7732-18-5	> 70
1-(2-hydroxyethyl)-2-pyrrolidone	3445-11-2	< 10
2-pyrrolidone	616-45-5	< 10
Aliphatic diol	Proprietary	< 5
Tetraethylene glycol	112-60-7	< 5
Yellow pigment	No Data	< 5
Alkoxy ether phosphate	Proprietary	< 2

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).

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. If irritation persists get medical attention.

Inhalation

Move 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

> 230 °F (> 110 °C) US EPA Method 1020; Setaflash Closed Tester

Hazardous combustion products

Refer to section 10.



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Flammable properties	Combustion generates toxic fumes of fluoride and/or fluorine compounds; phosphorous oxides.
Extinguishing media	
Suitable extinguishing media	CO2, water, dry chemical, or foam
Unsuitable extinguishing media	None known.
Unusual fire and explosion hazard	Combustion generates toxic fumes of fluoride and/or fluorine compounds; phosphorous oxides.
Special firefighting procedures	Wear self contained breathing apparatus for fire fighting if necessary.

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.
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 away from excessive heat or cold. Keep out of the reach of children.

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 & Chemical Properties

Color	Yellow
Odor threshold	Not available.
Physical state	Liquid.
pH	8.7 - 9.1
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not determined
Flash point	> 230 °F (> 110 °C) US EPA Method 1020; Setaflash Closed Tester
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 - 1.1
Relative density	Not available.
Solubility (water)	Soluble in water



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Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not determined
Decomposition temperature	Not available.
Viscosity	> 3 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. Decomposition of this product may yield oxides of phosphorus. hydrogen fluoride fluorinated hydrocarbons
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Not available.

12. Ecological Information

Ecotoxicity	96.00 hr, LC50 > 750 mg/l, fathead minnow (pimephales promelas)
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

Not regulated as dangerous goods.

General Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

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.



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State regulations

US - Pennsylvania RTK - Hazardous Substances: Listed substance
2-pyrrolidone (616-45-5) Listed.

16. Other Information

HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 1 Instability: 0
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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

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