



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name C9441A
Use of the preparation Inkjet printing
Version # 01
Revision date 10-03-2008
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
(Toll-free) 1-800-474-6836
(Direct) 1-208-323-2551

Date prepared Oct 02, 2008
MSDS number 169486

2. Hazards Identification

Emergency overview Contact with skin and eyes may result in irritation. Ingestion may result in nausea, vomiting and diarrhea. May cause sensitization of susceptible persons.

Acute health effects

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

Skin contact

2-pyrrolidone
Contact with skin may result in irritation.
Alkyldiol
Contact with skin may result in irritation.
Triethanolamine
Contact with skin may result in irritation. May cause sensitization of susceptible persons by skin contact.

Eye contact

2-pyrrolidone
Contact with eyes may result in irritation.
Alkyldiol
Contact with eyes may result in irritation.
Triethanolamine
Contact with eyes may result in mild irritation.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.
Alkyldiol
Inhalation may result in respiratory irritation.
Triethanolamine
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.
Diethylene glycol
Harmful if swallowed. May cause kidney and liver damage. May depress the central nervous system.



MATERIAL SAFETY DATA SHEET

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	< 80
2-pyrrolidone	616-45-5	< 10
Alkyldiol	Proprietary	< 10
Diethylene glycol	111-46-6	< 10
Triethanolamine	102-71-6	< 1

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 material is ingested, immediately contact a physician or poison control center.

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

Combustion generates toxic fumes of fluoride/fluorine compounds; aldehydes; ketones; acetylene.

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/fluorine compounds; aldehydes; ketones; acetylene.

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.

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.



MATERIAL SAFETY DATA SHEET

7. Handling and Storage

Handling Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Storage Keep out of the reach of children. Keep away from excessive heat or cold. Store away from strong oxidizers.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Triethanolamine	102-71-6	5 mg/m3	Not established	Not established

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 Magenta

Odor threshold Not available.

Physical state Not available.

pH 9.4

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 - 1.1

Relative density Not available.

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not determined

Decomposition temperature Not available.

10. Chemical Stability & Reactivity Information

Chemical stability Stable under recommended storage conditions.

Incompatible materials Incompatible with strong bases and oxidizing agents.



MATERIAL SAFETY DATA SHEET

Hazardous decomposition products

Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. aldehydes, ketones, hydrogen fluoride, fluorinated hydrocarbons

Possibility of hazardous reactions

Will not occur.

11. Toxicological Information**Carcinogenicity****IARC Monographs on Occupational Exposures to Chemical Agents: Evidence of carcinogenicity in humans**

Triethanolamine (102-71-6)

Inadequate data.

12. Ecological Information**Aquatic toxicity**

LC50/96h/Fathead minnows => 750 mg/L

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>.

14. Transport Information**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 - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance

No

Section 311 hazardous chemical

Yes

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/NDL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

State regulations**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

2-pyrrolidone (616-45-5)

Listed.

Diethylene glycol (111-46-6)

Listed.

Triethanolamine (102-71-6)

Listed.



MATERIAL SAFETY DATA SHEET

16. Other Information

HMIS® ratings	Health: 1 Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 2 Instability: 0
Issue date	Oct 2 2008 7:09PM
Revision	1
Replaces sheet dated	Apr 18 2007 3:35PM
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