



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the preparation C9440A

Use of the preparation Inkjet printing

Manufacturer information Hewlett-Packard Company
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Date prepared Aug 22, 2006

MSDS number 167698

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Component/substance | CAS number | % by weight |
|---------------------|-------------|-------------|
| Water | 7732-18-5 | > 70 |
| 2-pyrrolidone | 616-45-5 | < 7.5 |
| Diethylene glycol | 111-46-6 | < 7.5 |
| Alkyldiol | Proprietary | < 5 |
| Polymer 683-K salt | | < 2.5 |
| Triethanolamine | 102-71-6 | < 1.5 |

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).

3. 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.

Polymer 683-K salt
Contact with skin may result in irritation.

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



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Eye contact

2-pyrrolidone
Contact with eyes may result in irritation.

Alkyldiol
Contact with eyes may result in irritation.

Polymer 683-K salt
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.

Polymer 683-K salt
Swallowing large amounts may cause digestive discomfort. Ingestion may result in nausea, vomiting and diarrhea.

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.

4. FIRST AID MEASURES

First aid procedures

Skin

Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

Eye

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.

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; Pensky-Martens Closed Cup

Auto ignition temperature

Not determined

Hazardous combustion products

Refer to section 10.

Extinguishing media

CO₂, water, dry chemical, or foam



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| | |
|--|---|
| 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. |
| Procedures if material is released or spilled | 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. Store away from strong oxidizers. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | |
|--|---|-------------------------|
| Exposure limit values | Exposure limits have not been established for this product. | |
| ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA) | | |
| Triethanolamine | 102-71-6 | 5 mg/m ³ TWA |
| Personal protective equipment | | |
| General | Use personal protective equipment to minimize exposure to skin and eye. | |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. | |
| Exposure guidelines | Use in a well ventilated area. | |

9. PHYSICAL & CHEMICAL PROPERTIES

| | |
|-----------------------------|------------------|
| pH | 9.4 |
| Vapor pressure | Not determined |
| Boiling point | Not determined |
| Solubility | Soluble in water |
| Specific gravity | 1 - 1.1 |
| Flash point | > 200 °F |
| Vapor density | > 1 (air = 1.0) |
| Evaporation rate | Not determined |
| Flammability | Not determined |
| Oxidizing properties | Not determined |
| Color | Cyan |

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

| | |
|---|---|
| Stability | Stable under recommended storage conditions. |
| Hazardous polymerization | Will not occur. |
| Hazardous decomposition products | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. hydrogen fluoride, fluorinated hydrocarbons, aldehydes, ketones |
| Incompatibility | Incompatible with strong bases and oxidizing agents. |



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11. TOXICOLOGICAL INFORMATION

This ink formulation has not been tested for toxicological effects.
Refer to Section 3 for potential health effects and Section 4 for first aid measures.

12. ECOLOGICAL INFORMATION

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

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. TRANSPORTATION INFORMATION

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

IATA

Proper shipping name Not applicable
Hazard class Not applicable
Packaging exceptions N/A
Identification number (UN) none
Packing group N/A

15. REGULATORY INFORMATION

International regulations All chemical substances in this product are notified or exempt from notification under chemical substance notification laws in the following countries: Australia, Canada, European Union, Japan, New Zealand, Switzerland, and USA..

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

HMIS ratings Health: 1
Flammability: 1
Physical hazard: 0

NFPA ratings Health: 1
Flammability: 1
Instability: 0

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

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

16. OTHER INFORMATION

Other information This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

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Revision 1



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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 |