# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Identification of the preparation** C9415A

**Use of the preparation** Inkjet printing

**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** Aug 22, 2006

**MSDS number** 167697

## 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.

**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<br><br>Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions.<br><br>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 |

| | |
|---|---|
| **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/m3 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. |

## 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<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No |

## 16. OTHER INFORMATION

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

**Issue date** Aug 22 2006 11:09AM

**Revision** 1

# MATERIAL SAFETY DATA SHEET

**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 |