1. Product and Company Identification

Material name: C4836A
Use of the preparation: Inkjet printing
Version #: 08
Revision date: 02-14-2009
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
Email: hpcustomerinquiries@hp.com

Date prepared: Feb 13, 2009

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.

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>1,5-pentanediol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact with skin may result in irritation.</td>
<td>Alkyldicarboxylic acid</td>
</tr>
<tr>
<td>Contact with skin may result in irritation.</td>
<td>Substituted phthalocyanine salt #3</td>
</tr>
<tr>
<td>Contact with skin may result in irritation.</td>
<td>Tetraethylene glycol</td>
</tr>
<tr>
<td>Contact with skin may result in irritation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>1,5-pentanediol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact with eyes may result in irritation.</td>
<td>Alkyldicarboxylic acid</td>
</tr>
<tr>
<td>Contact can cause moderate to severe irritation and possible injury to the eyes.</td>
<td>Substituted phthalocyanine salt #3</td>
</tr>
<tr>
<td>Contact with eyes may result in irritation.</td>
<td>Tetraethylene glycol</td>
</tr>
<tr>
<td>Contact with eyes may cause irritation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Alkyldicarboxylic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation may result in respiratory irritation.</td>
<td>Substituted phthalocyanine salt #3</td>
</tr>
<tr>
<td>Inhalation may result in respiratory irritation.</td>
<td>Tetraethylene glycol</td>
</tr>
<tr>
<td>Inhalation may result in respiratory irritation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>Alkyldicarboxylic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.</td>
<td></td>
</tr>
</tbody>
</table>
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.

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

<table>
<thead>
<tr>
<th>Component/substance</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&lt; 80</td>
</tr>
<tr>
<td>1,5-pentanediol</td>
<td>111-29-5</td>
<td>&lt; 20</td>
</tr>
<tr>
<td>Alkyldicarboxylic acid</td>
<td>Proprietary</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Tetraethylene glycol</td>
<td>112-60-7</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Substituted phthalocyanine salt #3</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
</tbody>
</table>

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

Hazardous combustion products
Refer to section 10.

Flammable properties
None known.

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

9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Cyan</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>pH</td>
<td>3.8 - 4.2</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200 °F (&gt; 93.3 °C); Pensky-Martens Closed Cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt; 1 (air = 1.0)</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1 - 1.2</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>VOC</td>
<td>&lt; 3 %</td>
</tr>
<tr>
<td>Viscosity</td>
<td>&gt; 2 cp</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Aquatic toxicity</th>
<th>LC50/96h/Fathead minnows =461 mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static acute toxicity (trout), survival (100 mg/L) = 100%</td>
<td></td>
</tr>
<tr>
<td>Static acute toxicity (trout), survival (10 mg/L) = 100%</td>
<td></td>
</tr>
</tbody>
</table>

| 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

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class</td>
<td>Not applicable</td>
</tr>
<tr>
<td>UN number</td>
<td>None</td>
</tr>
<tr>
<td>Packing group</td>
<td>N/A</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>None</td>
</tr>
<tr>
<td>Packaging non bulk</td>
<td>None</td>
</tr>
<tr>
<td>Labels required</td>
<td>None</td>
</tr>
</tbody>
</table>

**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. 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.

## 16. Other Information

### HMIS® ratings

- Health: 1
- Flammability: 0
- Physical hazard: 0
MATERIAL SAFETY DATA SHEET

NFPA ratings
Health: 1
Flammability: 0
Instability: 0

Issue date
Feb 13 2009 4:56PM
Revision
8
Replaces sheet dated
Feb 5 2009 9:00AM

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

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

Material name C4836A
Creation date Jul 28, 2003
Version number 10