1. Product and Company Identification

Identification of the preparation: CB323 Series

Product use: Inkjet printing

Version #: 09

Revision date: 19-Feb-2013

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: hpcustomer.inquiries@hp.com

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.
  - 1,5-pentanediol
    - Contact with skin may result in irritation.
  - **Aliphatic diol**
    - Contact with skin may result in irritation.
  - **Ethyl alkyldiol**
    - Contact with skin may result in mild irritation.
  - **Metal nitrate # 2**
    - Contact with skin may result in irritation.

- **Eye contact**
  - 1-(2-hydroxyethyl)-2-pyrrolidone
    - Contact with eyes may result in irritation.
  - 1,5-pentanediol
    - Contact with eyes may result in irritation.
  - **Aliphatic diol**
    - Contact with eyes may result in irritation.
  - **Ethyl alkyldiol**
    - Contact with eyes may result in mild irritation.
  - **Metal nitrate # 2**
    - Contact with eyes may result in irritation.
  - **Substituted phthalocyanine salt #5**
    - Risk of serious damage to eyes.

- **Inhalation**
  - 1-(2-hydroxyethyl)-2-pyrrolidone
    - Inhalation may result in respiratory irritation.
  - **Aliphatic diol**
    - Inhalation may result in respiratory irritation.
  - **Metal nitrate # 2**
    - Inhalation may result in respiratory irritation.
Ingestion

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

Metal nitrate # 2
Contains nitrate salts, may cause methemoglobinemia.

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>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-(2-hydroxyethyl)-2-pyrrolidone</td>
<td>3445-11-2</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>1,5-pentanediol</td>
<td>111-29-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Aliphatic diol</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Ethyl alkylidol</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Metal nitrate # 2</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Phenylendiamine derivative</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Substituted phthalocyanine salt #5</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 65</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. 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.

General advice
No additional information

5. Fire Fighting Measures

Flammable properties
None known.

Extinguishing media

Suitable extinguishing media
CO2, water, dry chemical, or foam

Unsuitable extinguishing media
None known.

Specific methods
None established.

Hazardous combustion products
Refer to section 10.

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.
### 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.

**Engineering controls**
Use in a well ventilated area.

**Personal protective equipment**

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

**General**
Use personal protective equipment to minimize exposure to skin and eye.

### 9. Physical & Chemical Properties

**Appearance**
Not available.

**Color**
Cyan

**Odor**
Not available.

**Odor threshold**
Not available.

**Physical state**
Liquid

**Form**
liquid

**pH**
7.2 - 7.4

**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 limits in air, upper, % by volume**
Not available.

**Flammability limits in air, lower, % by volume**
Not Determined

**Vapor pressure**
Not determined

**Vapor density**
Not available.

**Specified gravity**
Not determined

**Relative density**
Not available.

**Solubility (water)**
Soluble in water

**Auto-ignition temperature**
Not Determined

**Decomposition temperature**
Not available.

**VOC**
< 271 g/l

**Other information**
For other VOC regulatory data/information see section 15.

### 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

**Serious eye damage/eye irritation**
Not available.
Further information
This ink formulation has not been tested for toxicological effects. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Ecological Information
Aquatic toxicity
- LC50/96h/Fathead minnows =463 mg/L
- Static acute toxicity (trout), survival (100 mg/L) = 100%
- Static acute toxicity (trout), survival (10 mg/L) = 100%

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
Further information
Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

RID
Not regulated as dangerous goods.

15. Regulatory Information
US federal regulations
- US TSCA 12(b): Does not contain listed chemicals.
  
  DEA Exempt Chemical Mixtures Code Number
  Not regulated.
  
  Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
  Not regulated.
  
  Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
  Not listed.
  
  TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
  Not regulated.

CERCLA (Superfund) reportable quantity
None

Occupational Safety and Health Administration (OSHA)
- 29 CFR 1910.1200 hazardous chemical
  No

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

State regulations
- US. Massachusetts RTK - Substance List
  Not regulated.
- US. New Jersey Worker and Community Right-to-Know Act
  Not regulated.
US. Pennsylvania RTK - Hazardous Substances
Not regulated.

US. Rhode Island RTK
Not regulated.

Regulatory information
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.

Other information
VOC content (less water, less exempt compounds) = < 1069 g/L (U.S. requirement, not for emissions)
VOC data based on formulation (Organic compounds minus solids)

16. Other Information

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

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

NFPA ratings
Health: 1
Flammability: 1
Instability: 0

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.

Issue date
19-Feb-2013

Manufacturer information
Hewlett-Packard Company
3000 Hanover Street
Palo Alto, California 94304-1112 US
(Direct) 1-503-494-7199
(Toll-free within the US) 1-800-457-4209

Explanation of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
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<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response Compensation and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>COC</td>
<td>Cleveland Open Cup</td>
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<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EPCRA</td>
<td>Emergency Planning and Community Right-to-Know Act (aka SARA)</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
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<tr>
<td>REC</td>
<td>Recommended</td>
</tr>
<tr>
<td>REL</td>
<td>Recommended Exposure Limit</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act of 1986</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-Term Exposure Limit</td>
</tr>
<tr>
<td>TCLP</td>
<td>Toxicity Characteristics Leaching Procedure</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
</tbody>
</table>