1. Product and Company Identification

Identification of the preparation: CB277Series[C]

Version #: 03
Revision date: 07-Jan-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.
Causes skin irritation.

Acute health effects:
Any potential hazards are presumed to be due to exposure to the components.

Skin contact:
- *1,5-pentanediol*
  Contact with skin may result in irritation.
- *2-pyrrolidone*
  Contact with skin may result in irritation.
- *Alkyldiol ethoxylate*
  Contact with skin may result in severe irritation.
- *Ethyl alkyldiol*
  Contact with skin may result in mild irritation.
- *Metal nitrate # 2*
  Contact with skin may result in irritation.

Eye contact:
- *1,5-pentanediol*
  Contact with eyes may result in irritation.
- *2-pyrrolidone*
  Contact with eyes may result in irritation.
- *Alkyldiol ethoxylate*
  Contact can cause moderate to severe irritation and possible injury to the eyes.
- *Ethyl alkyldiol*
  Contact with eyes may result in mild irritation.
- *Metal nitrate # 2*
  Contact with eyes may result in irritation.

Inhalation:
- *2-pyrrolidone*
  Inhalation may result in respiratory irritation.
- *Metal nitrate # 2*
  Inhalation may result in respiratory irritation.
Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Alkyldiol ethoxylate
Ingestion may cause irritation of mouth, throat, 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>1,5-pentanediol</td>
<td>111-29-5</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Alkyldiol ethoxylate</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Ethyl alkyldiol</td>
<td>Proprietary</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Metal nitrate # 2</td>
<td>Proprietary</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Substituted phthalocyanine salt # 4</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 60</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
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide.
For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

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.

### 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.

### 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.

### 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Cyan</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Physical state</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Not available</td>
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<tr>
<td><strong>pH</strong></td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Melting point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Freezing point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>&lt; 141 °F (&lt; 60.6 °C) Pensky-Martens Closed Cup</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability limits in air, upper, % by volume</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Flammability limits in air, lower, % by volume</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not available</td>
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<tr>
<td><strong>Specific gravity</strong></td>
<td>1.05</td>
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<tr>
<td><strong>Relative density</strong></td>
<td>Not available</td>
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<tr>
<td><strong>Solubility (water)</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>VOC</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>For other VOC regulatory data/information see section 15.</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 emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

#### Possibility of hazardous reactions
Will not occur.
11. Toxicological Information

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.

Acute toxicity: No information available.

Serious eye damage/eye irritation: Not available.

12. Ecological Information

Ecotoxicity: This product has not been tested for ecological effects.

Persistence and degradability: Not available.

13. Disposal Considerations

Disposal instructions: Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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.


CERCLA (Superfund) reportable quantity: None

Occupational Safety and Health Administration (OSHA):

29 CFR 1910.1200 hazardous chemical: Yes

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**
2-pyrrolidone (CAS 616-45-5)

**US. New Jersey Worker and Community Right-to-Know Act**
Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**
2-pyrrolidone (CAS 616-45-5) Listed.

**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

Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments). VOC content (less water, less exempt compounds) = < 697 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

07-Jan-2013

This data sheet contains changes from the previous version in section(s):

9. Physical & Chemical Properties: Other information
15. Regulatory Information: Other information
**Explanation of abbreviations**

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<td>American Conference of Governmental Industrial Hygienists</td>
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<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>
</tr>
<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>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<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>
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</tbody>
</table>
1. Product and Company Identification

Identification of the preparation: CB277Series[M]

Version #: 03
Revision date: 07-Jan-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. Causes skin irritation.

Acute health effects:
Any potential hazards are presumed to be due to exposure to the components.

Skin contact:
1,5-pentanediol
Contact with skin may result in irritation.
2-pyrrolidone
Contact with skin may result in irritation.
Alkyldiol ethoxylate
Contact with skin may result in severe irritation.
Ethyl alkyldiol
Contact with skin may result in mild irritation.
Metal nitrate # 2
Contact with skin may result in irritation.

Eye contact:
1,5-pentanediol
Contact with eyes may result in irritation.
2-pyrrolidone
Contact with eyes may result in irritation.
Alkyldiol ethoxylate
Contact can cause moderate to severe irritation and possible injury to the eyes.
Ethyl alkyldiol
Contact with eyes may result in mild irritation.
Metal nitrate # 2
Contact with eyes may result in irritation.

Substituted naphthalenesulfonate salt # 11
Contact with eyes may result in irritation.

Inhalation:
2-pyrrolidone
Inhalation may result in respiratory irritation.
Metal nitrate # 2
Inhalation may result in respiratory irritation.
Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Alkyldiol ethoxylate
Ingestion may cause irritation of mouth, throat, 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

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<th>Components</th>
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<td>616-45-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Alkyldiol ethoxylate</td>
<td>Proprietary</td>
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<td>&lt; 10</td>
</tr>
<tr>
<td>Metal nitrate # 2</td>
<td>Proprietary</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Substituted naphthalenesulfonate salt # 11</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 60</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
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide.
For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

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.

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.

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.

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
Magenta

Odor
Not available.

Odor threshold
Not available.

Physical state
Liquid

Form
Not available.

pH
8.5

Melting point
Not available.

Freezing point
Not available.

Boiling point
Not available.

Flash point
< 141 °F (< 60.6 °C) Pensky-Martens Closed Cup

Evaporation rate
Not available.

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

Flammability limits in air, lower, % by volume
Not available.

Vapor pressure
Not available.

Vapor density
Not available.

Specific gravity
1.05

Relative density
Not available.

Solubility (water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

VOC
Not available.

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 emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Possibility of hazardous reactions
Will not occur.
11. Toxicological Information

**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.

**Acute toxicity**
No information available.

**Serious eye damage/eye irritation**
Not available.

12. Ecological Information

**Ecotoxicity**
This product has not been tested for ecological effects.

**Persistence and degradability**
Not available.

13. Disposal Considerations

**Disposal instructions**
Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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
Yes

**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
2-pyrrolidone (CAS 616-45-5)

US. New Jersey Worker and Community Right-to-Know Act
Not regulated.

US. Pennsylvania RTK - Hazardous Substances
2-pyrrolidone (CAS 616-45-5) Listed.

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
Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments). VOC content (less water, less exempt compounds) = < 697 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
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Issue date
07-Jan-2013

This data sheet contains changes from the previous version in section(s):
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## Explanation of abbreviations

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<td>Department of Transportation</td>
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<td>National Institute for Occupational Safety and Health</td>
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</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
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</table>
1. Product and Company Identification
Identification of the preparation: CB277Series[Y]

Version #: 03
Revision date: 07-Jan-2013
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.
Causes skin irritation.

Acute health effects: Any potential hazards are presumed to be due to exposure to the components.

Skin contact:
- **1,5-pentanediol**
  Contact with skin may result in irritation.
- **2-pyrrolidone**
  Contact with skin may result in irritation.
- **Alkyldiol ethoxylate**
  Contact with skin may result in severe irritation.
- **Ethyl alkyldiol**
  Contact with skin may result in mild irritation.
- **Metal nitrate # 2**
  Contact with skin may result in irritation.
- **Substituted naphthalenesulfonate salt # 13**
  Contact with skin may result in irritation.

Eye contact:
- **1,5-pentanediol**
  Contact with eyes may result in irritation.
- **2-pyrrolidone**
  Contact with eyes may result in irritation.
- **Alkyldiol ethoxylate**
  Contact can cause moderate to severe irritation and possible injury to the eyes.
- **Ethyl alkyldiol**
  Contact with eyes may result in mild irritation.
- **Metal nitrate # 2**
  Contact with eyes may result in irritation.
- **Substituted naphthalenesulfonate salt # 13**
  Contact with eyes may result in irritation.
Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Metal nitrate # 2
Inhalation may result in respiratory irritation.

Substituted naphthalenesulfonate salt # 13
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Alkyldiol ethoxylate
Ingestion may cause irritation of mouth, throat, 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.

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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5-pentanediol</td>
<td>111-29-5</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td>616-45-5</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Alkyldiol ethoxylate</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Ethyl alkyldiol</td>
<td>Proprietary</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Metal nitrate # 2</td>
<td>Proprietary</td>
<td>&lt; 7.5</td>
</tr>
<tr>
<td>Substituted naphthalenesulfonate salt #12</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Substituted naphthalenesulfonate salt #13</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt; 60</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
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide.
For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.
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.

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.

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.

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
Yellow

Odor
Not available.

Odor threshold
Not available.

Physical state
Liquid

Form
Not available.

pH
8.5

Melting point
Not available.

Freezing point
Not available.

Boiling point
Not available.

Flash point
< 141 °F (< 60.6 °C) Pensky-Martens Closed Cup

Evaporation rate
Not available.

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

Flammability limits in air, lower, % by volume
Not available.

Vapor pressure
Not available.

Vapor density
Not available.

Specific gravity
1.05

Relative density
Not available.

Solubility (water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

VOC
Not available.
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 emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Possibility of hazardous reactions
Will not occur.

11. Toxicological Information

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.

Acute toxicity
No information available.

Serious eye damage/eye irritation
Not available.

12. Ecological Information

Ecotoxicity
This product has not been tested for ecological effects.

Persistence and degradability
Not available.

13. Disposal Considerations

Disposal instructions
Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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
Yes
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**
  - 2-pyrrolidone (CAS 616-45-5)
- **US. New Jersey Worker and Community Right-to-Know Act**
  - Not regulated.
- **US. Pennsylvania RTK - Hazardous Substances**
  - 2-pyrrolidone (CAS 616-45-5) Listed.
- **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
- Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).
- VOC content (less water, less exempt compounds) = < 697 g/L (U.S. requirement, not for emissions)

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
- 07-Jan-2013

This data sheet contains changes from the previous version in section(s):
- 15. Regulatory Information: Other information
### Explanation of abbreviations

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<td>CERCLA</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>COC</td>
<td>Cleveland Open Cup</td>
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<td>DOT</td>
<td>Department of Transportation</td>
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<td>EPCRA</td>
<td>Emergency Planning and Community Right-to-Know Act (aka SARA)</td>
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<td>IARC</td>
<td>International Agency for Research on Cancer</td>
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<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
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