



# MATERIAL SAFETY DATA SHEET

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## 1. Chemical Product and Company Identification

**Material name** CB278A  
**Use of the preparation** Inkjet printing  
**Version #** 02  
**Revision date** 28-Mar-2008  
**CAS #** Mixture  
**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** Mar 28, 2008  
**MSDS number** 264818

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## 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**

*1,5-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.



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## 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.

### *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

Component/Substance	CAS Number	% By Weight
<b>Cyan ink</b>		
Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Metal nitrate # 2	Proprietary	< 7.5
Substituted phthalocyanine salt # 4	Proprietary	< 5
Alkyldiol ethoxylate	Proprietary	< 2.5



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## Magenta ink

Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Metal nitrate # 2	Proprietary	< 7.5
Substituted naphthalenesulfonate salt # 11	Proprietary	< 5
Alkyldiol ethoxylate	Proprietary	< 2.5

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## Yellow ink

Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Metal nitrate # 2	Proprietary	< 7.5
Substituted naphthalenesulfonate salt # 13	Proprietary	< 5
Alkyldiol ethoxylate	Proprietary	< 2.5

## 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).

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## 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.

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## 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, CO<sub>2</sub>, water spray or regular foam.

#### Unsuitable extinguishing media

None known.

### Unusual fire and explosion hazard

None known.

### Special firefighting procedures

None established.

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## 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.



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## 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.

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## 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.

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## 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 hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

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## 9. Physical & Chemical Properties

### Color

Cyan, magenta, yellow

### Odor threshold

Not available

*Cyan ink*

Not available

*Magenta ink*

Not available

*Yellow ink*

Not available

### Physical state

Not available

*Cyan ink*

Not available

*Magenta ink*

Not available

*Yellow ink*

Not available

### pH

6.5 - 8.75

*Cyan ink*

Not available

*Magenta ink*

Not available

*Yellow ink*

Not available

### Melting point

Not available

*Cyan ink*

Not available

*Magenta ink*

Not available

*Yellow ink*

Not available



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<b>Freezing point</b>	Not available <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Boiling point</b>	Not determined <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Flash point</b>	> 200 °F (> 93.3 °C); Pensky-Martens Closed Cup <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Evaporation rate</b>	Not determined <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Flammability</b>	Not available. <i>Cyan ink</i> Not available. <i>Magenta ink</i> Not available. <i>Yellow ink</i> Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available



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<b>Flammability limits in air, lower, % by volume</b>	Not determined <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Vapor pressure</b>	Not determined <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Vapor density</b>	> 1 (air = 1.0) <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Specific gravity</b>	1 - 1.2 <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Relative density</b>	Not available <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Solubility in water</b>	Soluble in water <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available



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<b>Partition coefficient (n-octanol/water)</b>	Not available <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Auto-ignition temperature</b>	Not available <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>Decomposition temperature</b>	Not available <i>Cyan ink</i> Not available <i>Magenta ink</i> Not available <i>Yellow ink</i> Not available
<b>VOC</b>	< 3 %
<b>Viscosity</b>	> 2 cp

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## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Possibility of hazardous reactions</b>	Will not occur.

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## 11. Toxicological Information

<b>Toxicological information</b>	Refer to Section 3 for potential health effects and Section 4 for first aid measures.
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## 12. Ecological Information

<b>Aquatic toxicity</b>	This product has not been tested for ecological effects.
<b>Persistence and degradability</b>	Not available

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## 13. Disposal Considerations

<b>Disposal instructions</b>	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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
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## 14. Transportation Information

### Department of Transportation (DOT) Requirements

Not regulated as hazardous goods.



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## IATA

<b>Proper shipping name</b>	Not applicable
<b>Hazard class</b>	Not applicable
<b>UN number</b>	None
<b>Packing group</b>	N/A
<b>Packaging exceptions</b>	None

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## 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.

### State regulations

U.S. - Pennsylvania - RTK (Right to Know) List  
Metal nitrate # 2 Proprietary Present

U.S. - New Jersey - Right to Know Hazardous Substance List  
Metal nitrate # 2 Proprietary sn 1143

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## 16. Other Information

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

**NFPA ratings** Health: 1  
Flammability: 1  
Instability: 0

**Issue date** Mar 28 2008 9:28AM

**Revision** 2

**Replaces sheet dated** Jan 10 2006 2:34AM

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## Explanation of abbreviations

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