1. Product and Company Identification

Identification of the preparation
CE042Series

Product use
Inkjet printing. For use only in inkjet printing

Version #
01

Revision date
17-Oct-2012

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.

Cyclo Amide
Contact with skin may result in irritation.

Eye contact
1-(2-hydroxyethyl)-2-pyrrolidone
Contact with eyes may result in irritation.

Cyclo Amide
Contact with eyes may result in irritation.

Inhalation
1-(2-hydroxyethyl)-2-pyrrolidone
Inhalation may result in respiratory irritation.

Cyclo Amide
Inhalation may result in respiratory irritation.

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

Cyclo Amide
Swallowing large amounts may cause digestive discomfort.

Diethylene glycol
Harmful if swallowed. May cause kidney and liver damage. May depress the central nervous system.

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.

Specific hazards

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

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclo Amide</td>
<td>Proprietary</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>1-(2-hydroxyethyl)-pyrrolidone</td>
<td>3445-11-2</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Diethylene glycol</td>
<td>111-46-6</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Trade Secret blue pigment</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>1,2-Hexanediol</td>
<td>6920-22-5</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;70</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.

General advice: No additional information

5. Fire Fighting Measures

Flammable properties

Hydrogen fluoride, a corrosive and toxic gas, and other potentially hazardous fluorine-containing compounds may be released upon combustion.

Extinguishing media

Suitable extinguishing media: Dry chemical, CO2, water spray or regular 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.

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

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol (111-46-6)</td>
<td>TWA</td>
<td>10.0000 mg/m³</td>
</tr>
</tbody>
</table>

Exposure guidelines
Exposure limits have not been established for this product.

Personal protective equipment

Eye / face protection
Wear safety glasses with side shields (or goggles).

Skin protection
Wear appropriate chemical resistant clothing.

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
Light Cyan

Odor
Not available.

Odor threshold
Not available.

Physical state
Liquid

Form
Not available.

pH
8 - 10

Melting point
Not available.

Freezing point
Not available.

Boiling point
Not available.

Flash point
200 °F (93.3 °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 - 1.05

Relative density
Not available.

Solubility (water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

VOC
< 157 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., fluorinated hydrocarbons and hydrogen fluoride.

Possibility of hazardous reactions
None known.

11. Toxicological Information

Serious eye damage/eye irritation
Not available.

Material name: CE042Series
12159 Version #: 01 Revision date: 17-Oct-2012 Print date: 17-Oct-2012
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
Ecotoxicity
No information available.
Aquatic toxicity
No information available.
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
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.
US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

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.
Diethylene glycol (CAS 111-46-6) Listed.

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.

VOC content (less water, less exempt compounds) = < 962 g/L (U.S. requirement, not for emissions)
VOC data based on formulation (Organic compounds minus solids)

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

Health: 1
Flammability: 1
Physical hazard: 0

Health: 1
Flammability: 1
Instability: 0

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
17-Oct-2012

This data sheet contains changes from the previous version in section(s):
9. Physical & Chemical Properties: Other information
15. Regulatory Information: Other information

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
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<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>
</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>
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<tr>
<td>TCLP</td>
<td>Toxicity Characteristics Leaching Procedure</td>
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<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
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<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
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</table>