1. Product and Company Identification

Identification of the preparation: CE041Series

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.

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)-2-pyrrolidone</td>
<td>3445-11-2</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Trade Secret Pigments</td>
<td>Proprietary</td>
<td>&lt; 2.5</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.

Keep at temperatures between 15 and 35°C.

8. Exposure Controls / Personal Protection

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.
9. Physical & Chemical Properties

Appearance: Not available.
Color: Light Magenta
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 - 1.1
Relative density: Not available.
Solubility (water): Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.

VOC: < 141 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.
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.

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.
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.

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) = < 1040 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
17-Oct-2012

This data sheet contains
9. Physical & Chemical Properties: Other information
14. Transport Information: Further information
15. Regulatory Information: Other information

Manufacturer information
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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