1. Product and Company Identification

Identification of the preparation: CE043Series
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: Cyclo Amide
Contact with skin may result in irritation.

Eye contact: Cyclo Amide
Contact with eyes may result in irritation.

Inhalation: Cyclo Amide
Inhalation may result in respiratory irritation.

Ingestion: 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.

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.

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; 15</td>
</tr>
<tr>
<td>Carbon black</td>
<td>Proprietary</td>
<td>&lt; 5</td>
</tr>
</tbody>
</table>
Diethylene glycol 111-46-6 < 5
Water 7732-18-5 >70

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).
Carbon black is present only in a bound form in this preparation.

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
Occupational exposure limits

<table>
<thead>
<tr>
<th>ACGIH Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (Proprietary)</td>
<td>TWA</td>
<td>3.0000 mg/m³</td>
<td>Inhalable fraction.</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
Black.

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
< 180 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

Carcinogenicity

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint.

ACGIH Carcinogens
Carbon black (CAS Proprietary) A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity
Carbon black (CAS Proprietary) 2B Possibly carcinogenic to humans.

IARC Monographs: Evidence of carcinogenicity in humans
Carbon black (CAS Proprietary) Inadequate data.

Serious eye damage/eye irritation
Not available.

Symptoms and target organs

Target Organs (NIOSH)
Carbon black (CAS Proprietary) Eyes, Respiratory system

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
Material name: CE043Series
12163    Version #: 01    Revision date: 17-Oct-2012    Print date: 17-Oct-2012

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

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>
</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>
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<tr>
<td>DOT</td>
<td>Department of Transportation</td>
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<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>
</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>