

| 1. Product and Company               | Identification   |
|--------------------------------------|--|
| Identification of the<br>preparation | CE041Series  |
| Product use                          | Inkjet printing. For use only in inkjet printing   |
| Version #                            | 01   |
| Revision date                        | 11-Nov-2010  |
| CAS #                                | Mixture  |
| Company identification               | Hewlett-Packard Company<br>3000 Hanover Street<br>Palo Alto, CA 94304-1185<br>United States<br>Telephone 650-857-1501  |
|                                      | Hewlett-Packard health effects line<br>(Toll-free within the US) 1-800-457-4209<br>(Direct) 1-503-494-7199<br>HP Customer Care Line<br>(Toll-free within the US) 1-800-474-6836<br>(Direct) 1-208-323-2551<br>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                         | <i>1-(2-hydroxyethyl)-2-pyrrolidone</i><br>Contact with skin may result in irritation.   |
|                                      | <i>Cyclo Amide</i><br>Contact with skin may result in irritation.  |
| Eye contact                          | 1-(2-hydroxyethyl)-2-pyrrolidone<br>Contact with eyes may result in irritation.<br>Cyclo Amide<br>Contact with eyes may result in irritation.  |
| Inhalation                           | <i>1-(2-hydroxyethyl)-2-pyrrolidone</i><br>Inhalation may result in respiratory irritation.<br><i>Cyclo Amide</i>  |
|                                      | Inhalation may result in respiratory irritation.   |
| Ingestion                            | <i>1-(2-hydroxyethyl)-2-pyrrolidone</i><br>Ingestion may result in nausea, vomiting and diarrhea.  |
|                                      | <i>Cyclo Amide</i><br>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 thi 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.   |

| Components   |  | CAS #                     | Percent                    |
|--|--|---------------------------|----------------------------|
| Cyclo Amide  |  | Proprietary               | < 10                       |
| Trade Secret Colorant                                  |  | Proprietary               | < 2.5                      |
| 1-(2-hydroxyethyl)-2-pyrrolidone                       |  | 3445-11-2                 | < 1                        |
| Megaface F-444   |  | N/A                       | < 0.1                      |
| Water  |  | 7732-18-5                 | >70                        |
| Composition comments                                   | This ink supply contains an aqueous ink formula<br>This product has been evaluated using criteria s<br>Communication Standard).            |                           | 1200 (Hazard               |
| 4. First Aid Measures                                  |  |                           |                            |
| First aid procedures                                   |  |                           |                            |
| Eye contact  | Do not rub eyes. Immediately flush with large a least 15 minutes or until particles are removed.   |                           |                            |
| Skin contact   | Wash affected areas thoroughly with mild soap develops or persists.  | and water. Get medical a  | ttention if irritation     |
| Inhalation   | Remove to fresh air. If symptoms persist, get m  | edical attention.         |                            |
| Ingestion  | If ingestion of a large amount does occur, seek  | medical attention.        |                            |
| 5. Fire Fighting Measure                               | S  |                           |                            |
| Flammable properties                                   | Hydrogen fluoride, a corrosive and toxic gas, an compounds may be released upon combustion.  | d other potentially hazar | dous fluorine-containing   |
| Extinguishing media<br>Suitable extinguishing<br>media | Dry chemical, CO2, water spray or regular foam   |                           |                            |
| Unsuitable extinguishing media                         | None known.  |                           |                            |
| Specific methods                                       | None established.  |                           |                            |
| Hazardous combustion<br>products                       | Refer to section 10.   |                           |                            |
| 6. Accidental Release Me                               | easures  |                           |                            |
| Personal precautions                                   | Wear appropriate personal protective equipmen  | t.                        |                            |
| Environmental precautions                              | Do not let product enter drains. Do not flush int  | o surface water or sanita | ry sewer system.           |
| Methods for containment                                | Dike the spilled material, where this is possible.<br>or diatomaceous earth, commercial sorbents, or                                       |                           | ent such as dry clay, sanc |
| Methods for cleaning up                                | Soak up with inert absorbent material.   |                           |                            |
| Other information                                      | Soak up with inert absorbent material. Slowly va<br>sealed container. Dispose of in compliance with<br>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 fro   | om excessive heat or colo | d.                         |
|  | Keep at temperatures between 15 and 35°C.  |                           |                            |
| 8. Exposure Controls / P                               | ersonal Protection   |                           |                            |
| Exposure guidelines                                    | Exposure limits have not been established for th   | nis product.              |                            |
| Personal protective equipmen                           |  |                           |                            |
| General hygiene<br>considerations                      | Handle in accordance with good industrial hygie  | ne and safety practice.   |                            |
| considerations   |  |                           |                            |

# 9. Physical & Chemical Properties

| 5. Physical & chemical P                          |  |
|---|--|
| Appearance  | Not available.   |
| Color   | Light Magenta  |
| Odor  | Not available.   |
| Odor threshold                                    | Not available.   |
| Physical state                                    | Liquid   |
| Form  | Not available.   |
| рН  | 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,<br>upper, % by volume | Not available.   |
| Flammability limits in air,<br>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                                 | VOC content (less water, less exempt compounds) = $< 1040$ g/L (U.S. requirement, not for emissions)   |
| 10. Chemical Stability &                          | Reactivity Information   |
| Chemical stability                                | Stable under recommended storage conditions.   |
| Incompatible materials                            | Incompatible with strong bases and oxidizing agents.   |
| Hazardous decomposition<br>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<br>reactions             | None known.  |
| 11. Toxicological Inform                          | ation  |
| Sariaus ava damaga /ava                           | Net eveileble  |

| Serious eye damage/eye<br>irritation | Not available.   |
|--------------------------------------|--|
| Skin sensitization                   | Not available.   |
| Further information                  | This ink formulation has not been tested for toxicological effects.<br>Refer to Section 2 for potential health effects and Section 4 for first aid measures. |

# **12. Ecological Information**

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 United States 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                   | tion   |
|--|--|
| US federal regulations                       | US TSCA 12(b): Does not contain listed chemicals.<br>US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders<br>under TSCA.   |
| CERCLA (Superfund) reportal<br>None          | ble quantity   |
| Occupational Safety and Heal                 | Ith Administration (OSHA)  |
| 29 CFR 1910.1200<br>hazardous chemical       | No   |
| Superfund Amendments and                     | Reauthorization Act of 1986 (SARA)   |
| Hazard categories                            | Immediate Hazard - No<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No   |
| Section 302 extremely<br>hazardous substance | No   |
| Section 311 hazardous<br>chemical            | No   |
| 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.   |
| 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<br>Flammability: 1<br>Physical hazard: 0   |
| NFPA ratings                                 | Health: 1<br>Flammability: 1<br>Instability: 0   |
| Disclaimer                                   | This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard<br>Company. Data is the most current known to Hewlett-Packard Company at the time of preparatior<br>of this document and is believed to be accurate. It should not be construed as guaranteeing<br>specific properties of the products as described or suitability for a particular application. This<br>document was prepared to the requirements of the jurisdiction specified in Section 1 above and<br>may not meet regulatory requirements in other countries. |
| Issue date                                   | 11-Nov-2010  |
| Manufacturer information                     | Hewlett-Packard Company<br>1000 NE Circle Boulevard<br>Corvallis, OR 97330-4239 US<br>(Direct) 1-503-494-7199<br>(Toll-free within the US) 1-800-457-4209  |

## Explanation of abbreviations

| ACGIHAmerican Conference of Governmental Industrial HygienistsCASChemical Abstracts ServiceCERCLAComprehensive Environmental Response Compensation and Liability ActCFRCode of Federal Regulations |
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| <b>CERCLA</b> Comprehensive Environmental Response Compensation and Liability Act  |
|  |
| Cede et Eederal Degulations  |
| CFR Code of Federal Regulations  |
| Cleveland Open Cup   |
| <b>DOT</b> 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   |