



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

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|-----------------------------------|---|
| 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 | <p>Any potential hazards are presumed to be due to exposure to the components.</p> <p>Skin contact</p> <p><i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Contact with skin may result in irritation.</p> <p><i>Cyclo Amide</i> Contact with skin may result in irritation.</p> <p>Eye contact</p> <p><i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Contact with eyes may result in irritation.</p> <p><i>Cyclo Amide</i> Contact with eyes may result in irritation.</p> <p>Inhalation</p> <p><i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Inhalation may result in respiratory irritation.</p> <p><i>Cyclo Amide</i> Inhalation may result in respiratory irritation.</p> <p>Ingestion</p> <p><i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Ingestion may result in nausea, vomiting and diarrhea.</p> <p><i>Cyclo Amide</i> Swallowing large amounts may cause digestive discomfort.</p> <p><i>Diethylene glycol</i> Harmful if swallowed. May cause kidney and liver damage. May depress the central nervous system.</p> |
| Potential health effects | |
| Routes of exposure | <p>Potential routes of overexposure to this product are skin and eye contact</p> <p>Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions.</p> <p>Complete toxicity data are not available for this specific formulation</p> |
| 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

| Components | CAS # | Percent |
|----------------------------------|-------------|---------|
| Cyclo Amide | Proprietary | < 10 |
| 1-(2-hydroxyethyl)-2-pyrrolidone | 3445-11-2 | < 5 |
| Diethylene glycol | 111-46-6 | < 2.5 |
| Trade Secret blue pigment | Proprietary | < 2.5 |
| 1,2-Hexanediol | 6920-22-5 | < 1 |
| 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).

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

U.S. - WEEL

| Components | Type | Value |
|------------------------------|------|---------------|
| Diethylene glycol (111-46-6) | TWA | 10.0000 mg/m3 |

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

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|------------------------------------|--|
| 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

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|-----------------------------------|----------------|
| 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.
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 No
hazardous chemical

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

Diethylene glycol (CAS 111-46-6)

Listed.

US. Rhode Island RTK

Diethylene glycol (CAS 111-46-6)

| | |
|-------------------------------|---|
| 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/NDL), Australia, Japan, Philippines, South Korea, New Zealand, and China. |
| Other information | 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) |

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 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 |

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 |