



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Identification of the preparation	CE038Series
Product use	Inkjet printing. For use only in inkjet printing
Version #	01
Revision date	06-Nov-2010
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	
Skin contact	Any potential hazards are presumed to be due to exposure to the components. <i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Contact with skin may result in irritation. <i>Cyclo Amide</i> Contact with skin may result in irritation.
Eye contact	<i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Contact with eyes may result in irritation. <i>Cyclo Amide</i> Contact with eyes may result in irritation.
Inhalation	<i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Inhalation may result in respiratory irritation. <i>Cyclo Amide</i> Inhalation may result in respiratory irritation.
Ingestion	<i>1-(2-hydroxyethyl)-2-pyrrolidone</i> Ingestion may result in nausea, vomiting and diarrhea. <i>Cyclo Amide</i> Swallowing large amounts may cause digestive discomfort. <i>Diethylene glycol</i> 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.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Cyclo Amide	Proprietary	< 10
Diethylene glycol	111-46-6	< 5
Trade secret red colorant	Proprietary	< 5
1-(2-hydroxyethyl)-2-pyrrolidone	3445-11-2	< 2.5
1,2-Hexanediol	6920-22-5	< 2.5
Megaface F-444	N/A	< 0.1
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.

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, CO ₂ , 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

U.S. - WEEL

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

Exposure limits have not been established for this product.

Personal protective equipment

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

Red

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

< 174 g/L

Other information

VOC content (less water, less exempt compounds) = < 942 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 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.

Skin sensitization

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

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

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.

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 - Pennsylvania RTK - Hazardous Substances: Listed substance**

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

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.

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.

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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