MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification of the preparation	C9362 Series
Use of the preparation	Inkjet printing
Manufacturer information	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis, OR 97330-4239 US
Hewlett-Packard health effects line	
(Toll-free within the US)	1-800-457-4209
(Direct)	1-503-494-7199
General information telephone number	
HP Customer Care Line	1-800-474-6836
(Toll-free)	1-800-474-6836
(Direct)	1-208-323-2551
Date prepared	Feb 28, 2007
MSDS number	64125

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component/substance	CAS number	% by weight
Water	7732-18-5	> 70
2-pyrrolidone	616-45-5	< 10
1,5-pentanediol	111-29-5	< 5
Modified carbon black #6	Proprietary	< 5
Substituted diol	Proprietary	< 2.5

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).

3. 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

1,5-pentanediol
Contact with skin may result in irritation.

2-pyrrolidone
Contact with skin may result in irritation.

Substituted diol
Contact with skin may result in irritation.

Eye contact

1,5-pentanediol
Contact with eyes may result in irritation.

2-pyrrolidone
Contact with eyes may result in irritation.

Substituted diol
Contact with eyes may result in irritation.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

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 Carbon Black: Chronic inhalation studies performed with fine dust particles resulted in lung tumors in animals. The IARC classification was based upon these results. IARC also concluded "there is inadequate evidence in humans for the carcinogenicity of carbon black." Inhalation of fine dust particles is not expected to occur during normal conditions of use of this ink.

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.

4. FIRST AID MEASURES

First aid procedures

Skin Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Eye 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.

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

Flash point and method > 93.3 °C (> 200 °F); Pensky-Martens Closed Cup

Hazardous combustion products Refer to section 10.

Extinguishing media Dry chemical, CO_2, water spray or regular foam.

Unsuitable extinguishing media None known.

Unusual fire and explosion hazard None known.

Special firefighting procedures None established.

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.

Procedures if material is released or spilled 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

Exposure limit values	Exposure limits have not been established for this product.
Personal protective equipment	
General	Use personal protective equipment to minimize exposure to skin and eye.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Exposure guidelines	Use in a well ventilated area.

9. PHYSICAL & CHEMICAL PROPERTIES

pH	7.5 - 8.2
Vapor pressure	Not determined
Boiling point	Not determined
Solubility	Soluble in water
Specific gravity	1 - 1.2
VOC content	< 3 %
Flash point	> 93.3 °C (> 200 °F)
Viscosity	> 2 cp
Vapor density	> 1 (air = 1.0)
Evaporation rate	Not determined
Flammability	Not determined
Oxidizing properties	Not determined
Color	Black

10. CHEMICAL STABILITY & REACTIVITY INFORMATION

Stability	Stable under recommended storage conditions.
Hazardous polymerization	Will not occur.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatibility	Incompatible with strong bases and oxidizing agents.

11. TOXICOLOGICAL INFORMATION

This ink formulation has not been tested for toxicological effects.
Refer to Section 3 for potential health effects and Section 4 for first aid measures.

12. ECOLOGICAL INFORMATION

Aquatic toxicity	LC50/96h/Fathead minnows =>750 mg/L.

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. TRANSPORTATION INFORMATION

General	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
Packaging exceptions	None
Identification number (UN)	None
Packing group	N/A

15. REGULATORY INFORMATION

International regulations 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.

US federal regulations US TSCA 12(b): Contains sodium nitrite (CASRN 7632-00-0), subject to export notification requirements.

HMIS ratings

Health:	1
Flammability:	1
Physical hazard:	1

NFPA ratings

Health:	1
Flammability:	1
Instability:	1

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	Yes
Hazard categories	Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

16. OTHER INFORMATION

Other information	This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).
Issue date	Feb 28 2007 2:05PM
Revision	5
Replaces sheet dated	Feb 1 2007 9:00AM
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.
MSDS sections updated	3. Hazards Identification: Chronic health effects

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

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Identification of the preparation	C9361 Series
Use of the preparation	Inkjet printing
Manufacturer information	Hewlett-Packard Company 1000 NE Circle Boulevard Corvallis, OR 97330-4239 US
Hewlett-Packard health effects line	
(Toll-free within the US)	1-800-457-4209
(Direct)	1-503-494-7199
General information telephone number	
HP Customer Care Line	1-800-474-6836
(Toll-free)	1-800-474-6836
(Direct)	1-208-323-2551
Date prepared	Jun 05, 2007
MSDS number	153835

2. Composition / Information on Ingredients

Component/Substance	CAS Number	% By Weight
Cyan ink		
Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Substituted phthalocyanine salt # 4	Proprietary	< 5
Metal nitrate # 2	Proprietary	< 5
Alkyldiol ethoxylate	Proprietary	< 2.5
Magenta ink		
Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Substituted naphthalenesulfonate salt # 11	Proprietary	< 5
Metal nitrate # 2	Proprietary	< 5
Alkyldiol ethoxylate	Proprietary	< 2.5
Yellow ink		
Water	7732-18-5	> 60
1,5-pentanediol	111-29-5	< 10
Ethyl alkyldiol	Proprietary	< 7.5
2-pyrrolidone	616-45-5	< 7.5
Substituted naphthalenesulfonate salt # 13	Proprietary	< 7.5
Metal nitrate # 2	Proprietary	< 5
Alkyldiol ethoxylate	Proprietary	< 2.5

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).

3. 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

1,5-pentanediol
Contact with skin may result in irritation.

2-pyrrolidone
Contact with skin may result in irritation.

Alkyldiol ethoxylate
Contact with skin may result in severe irritation.

Ethyl alkyldiol
Contact with skin may result in mild irritation.

Metal nitrate # 2
Contact with skin may result in irritation.

Substituted naphthalenesulfonate salt # 13
Contact with skin may result in irritation.

Eye contact

1,5-pentanediol
Contact with eyes may result in irritation.

2-pyrrolidone
Contact with eyes may result in irritation.

Alkyldiol ethoxylate
Contact can cause moderate to severe irritation and possible injury to the eyes.

Ethyl alkyldiol
Contact with eyes may result in mild irritation.

Metal nitrate # 2
Contact with eyes may result in irritation.

Substituted naphthalenesulfonate salt # 11
Contact with eyes may result in irritation.

Substituted naphthalenesulfonate salt # 13
Contact with eyes may result in irritation.

Inhalation

2-pyrrolidone
Inhalation may result in respiratory irritation.

Metal nitrate # 2
Inhalation may result in respiratory irritation.

Substituted naphthalenesulfonate salt # 13
Inhalation may result in respiratory irritation.

Ingestion

2-pyrrolidone
Ingestion may result in nausea, vomiting and diarrhea.

Alkyldiol ethoxylate
Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea.

Metal nitrate # 2
Contains nitrate salts, may cause methemoglobinemia.

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.

4. First Aid Measures

First aid procedures

Skin Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Eye 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.

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

Flash point and method > 200 °F (> 93.3 °C); Pensky-Martens Closed Cup

Hazardous combustion products Refer to section 10.

Extinguishing media Dry chemical, CO_2, water spray or regular foam.

Unsuitable extinguishing media None known.

Unusual fire and explosion hazard None known.

Special firefighting procedures None established.

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.

Procedures if material is released or spilled 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

Exposure limit values None established.

Personal protective equipment

General Use personal protective equipment to minimize exposure to skin and eye.

Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Exposure guidelines	Use in a well ventilated area.

9. Physical & Chemical Properties

pH	6.2 - 6.8
Vapor pressure	Not determined
Boiling point	Not determined
Solubility	Soluble in water
Specific gravity	1 - 1.2
VOC content	< 3 %
Flash point	> 200 °F (> 93.3 °C)
Viscosity	> 2 cp
Vapor density	> 1 (air = 1.0)
Evaporation rate	Not determined
Flammability	Not determined
Oxidizing properties	Not determined
Color	Cyan, magenta, yellow

10. Chemical Stability & Reactivity Information

Stability	Stable under recommended storage conditions.
Hazardous polymerization	Will not occur.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatibility	Incompatible with strong bases and oxidizing agents.

11. Toxicological Information

This ink formulation has not been tested for toxicological effects.
Refer to Section 3 for potential health effects and Section 4 for first aid measures.

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Cyan ink
LC50/96h/Fathead minnows =< 400 mg/L

Magenta ink
LC50/96h/Fathead minnows =< 400 mg/L

Yellow ink
LC50/96h/Fathead minnows =< 400 mg/L

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. Transportation Information

General	Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
Packaging exceptions	None
Identification number (UN)	None
Packing group	N/A

15. Regulatory Information

International regulations 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.

US federal regulations US TSCA 12(b): Does not contain listed chemicals.

HMIS ratings

Health:	1
Flammability:	1
Physical hazard:	0

NFPA ratings

Health:	1
Flammability:	1
Instability:	0

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance	No
Section 311 hazardous chemical	No
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

16. Other Information

Other information	This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).
Issue date	Jun 5 2007 2:41PM
Revision	5
Replaces sheet dated	Feb 28 2007 10:11PM
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.
MSDS sections updated	Chemical Product and Company Identification: Product & Company Identification Composition / Information on Ingredients: Ingredient Extensions

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