




# SAFETY DATA SHEET

## 1. Product and company identification

<b>Important information</b>	*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***	
<b>Name of the chemical</b>	C4944Series	
<b>Other means of identification</b>	None.	
<b>Recommended use of the chemical and restrictions on use</b>		
<b>Recommended use</b>	Inkjet printing	
<b>Recommended restrictions</b>	None known.	
<b>Company identification</b>	HP Taiwan Information Technology Ltd. 10F-2, No. 66 Jing Mao 2 Road Taipei, Taipei City, Taiwan 11568	
<b>Telephone</b>	886-2-8722-9000	
<b>HP Inc. health effects line</b>		
<b>(Toll-free within the US)</b>	1-800-457-4209	
<b>(Direct)</b>	1-760-710-0048	
<b>HP Inc. Customer Care Line</b>		
<b>(Toll-free within the US)</b>	1-800-474-6836	
<b>(Direct)</b>	1-208-323-2551	
<b>Email:</b>	hpcustomer.inquiries@hp.com	

## 2. Hazards identification

<b>Hazard classification</b>		
<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Reproductive toxicity (fertility, the unborn child)	Category 1B
<b>Environmental hazards</b>	Not classified.	
<b>Label elements</b>		
<b>Symbols</b>		
<b>Signal word</b>	Danger	
<b>Hazard statement</b>	May damage fertility or the unborn child.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.	
<b>Response</b>	IF exposed or concerned: Get medical advice/attention.	
<b>Storage</b>	Store locked up.	
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Other hazards</b>	Complete toxicity data are not available for this specific formulation.  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.	
<b>Supplemental information</b>	2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.	

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### 3. Composition/information on ingredients

#### Mixture

Chemical properties	CAS Number	Concentration (%)
Water	7732-18-5	80-90
2-pyrrolidone	616-45-5	<7.5

<b>Composition comments</b>	This ink supply contains an aqueous ink formulation. 2-pyrrolidone: Specific Concentration Limit 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.
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### 4. First aid measures

#### First aid measures for different exposure routes

<b>Inhalation</b>	Remove to fresh air. If symptoms persist, get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.
<b>Most important symptoms and effects</b>	Not available.
<b>Personal protection for first-aid responders</b>	Not available.
<b>Notes to physician</b>	Not available.

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### 5. Fire-fighting measures

<b>Extinguishing media</b>	Dry chemical, CO2, water spray or regular foam.
<b>Extinguishing media to avoid</b>	None known.
<b>Specific hazards during fire fighting</b>	None.
<b>Special fire fighting procedures</b>	None.
<b>Protection of fire-fighters</b>	None.
<b>Specific methods</b>	None established.

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### 6. Accidental release measures

<b>Personal precautions</b>	Wear appropriate personal protective equipment.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
<b>Spill cleanup methods</b>	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.

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### 7. Handling and storage

<b>Handling</b>	Avoid contact with skin, eyes and clothing.
<b>Storage</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

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### 8. Exposure controls/personal protection

#### Exposure limits

No exposure limits noted for ingredient(s).

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Exposure limits have not been established for this product.
<b>Appropriate engineering controls</b>	Use in a well ventilated area. Provide adequate ventilation.

#### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Not required under intended use.
<b>Skin protection</b>	
<b>Hand protection</b>	Not available.
<b>Other</b>	Use personal protective equipment to minimize exposure to skin and eye.
<b>Respiratory protection</b>	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
<b>Thermal hazards</b>	Not available.

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## 9. Physical and chemical properties

### Appearance

Physical state	Liquid.
Form	Not available.
Color	Light Cyan

Odor Not available.

Odor threshold Not available.

Melting point/freezing point Not available.

pH 7.8 - 8.4

Boiling point, initial boiling point, and boiling range Not determined

Flammability (solid, gas) Not available.

Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Decomposition temperature Not available.

Auto-ignition temperature Not available.

### Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not determined

Vapor density  $\geq 1$  (air = 1.0)

Density 1.03 g/cm<sup>3</sup>

### Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Evaporation rate Not determined

### Other data

Oxidizing properties Not determined

Percent volatile 12 % estimated

Viscosity  $\geq 2$  cp

VOC < 63 g/l

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## 10. Stability and reactivity

Stability Stable under recommended storage conditions.

Possibility of hazardous reactions Will not occur.

Conditions to avoid None.

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.

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## 11. Toxicological information

### Information on likely routes of exposure

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

Symptoms Not available.

### Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.	
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.	
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.	
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.	
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.	
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.	
<b>Reproductive toxicity</b>	May damage fertility or the unborn child.	
	2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).	
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.	
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.	
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.	
<b>Chronic effects</b>	Not available.	
<b>Other information</b>	Complete toxicity data are not available for this specific formulation	

## 12. Ecological information

<b>Aquatic toxicity</b>	This product has not been tested for ecological effects.	
<b>Ecotoxicity</b>		
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
2-pyrrolidone (CAS 616-45-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia pulex) 13.21 mg/l, 48 hours
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulation</b>		
<b>Bioaccumulative potential</b>		
<b>Octanol/water partition coefficient log Kow</b>		
2-pyrrolidone	-0.85	
<b>Mobility in soil</b>	Not available.	
<b>Other hazardous effects</b>	Not available.	

## 13. Disposal considerations

<b>Disposal instructions</b>	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
<b>Residual waste</b>	Not available.
<b>Contaminated packaging</b>	Not available.
<b>Local disposal regulations</b>	Not available.

## 14. Transport information

<b>DOT</b>	
<b>UN number</b>	Not available.
<b>UN proper shipping name</b>	Not Regulated
<b>Transport hazard class(es)</b>	
<b>Class</b>	Not available.
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.

**Environmental hazards****Marine pollutant** No**Special precautions for user** Not available.**IATA****UN number** Not available.**UN proper shipping name** Not Regulated**Transport hazard class(es)****Class** Not available.**Subsidiary risk** -**Packing group** Not available.**Environmental hazards** No**Special precautions for user** Not available.**IMDG****UN number** Not available.**UN proper shipping name** Not Regulated**Transport hazard class(es)****Class** Not available.**Subsidiary risk** -**Packing group** Not available.**Transport hazard class(es)****Marine pollutant** No**EmS** Not available.**Special precautions for user** Not available.**ADR****UN number** Not available.**UN proper shipping name** Not Regulated**Transport hazard class(es)****Class** Not available.**Subsidiary risk** -**Hazard No. (ADR)** Not available.**Tunnel restriction code** Not available.**Packing group** Not available.**Environmental hazards** No**Special precautions for user** Not available.**Further information**

Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

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**15. Regulatory information****Applicable regulations****Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste**

Not listed.

**Priority Management Chemical List (Regulations on Handling Priority Managed Chemicals), as amended**

Not listed.

**Toxic Chemical Substances (TCS) List (EPA Toxic Substances Notice No. 0960095331E, Tables 1-3, Dec. 17, 2007, as amended)**

Not listed.

**GHS Classification List: GHS implementation phase 1, 2 and 3 (CLA No. 0980145063, 0990146707, and 1020146801)**

2-pyrrolidone (CAS 616-45-5)

**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.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Montreal Protocol**

Not applicable.

**Kyoto protocol**

Not applicable.

## 16. Other information

**References** Not available.

**Issued by** HP Inc.

**Prepared by**  
HP Inc.

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### Explanation of abbreviations

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REC</b>	Recommended
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act of 1986
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>VOC</b>	Volatile Organic Compounds