




# 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>	CH616Series	
<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>GHS 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>GHS 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>GHS 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>GHS Supplemental information</b>	2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%.	

## 3. Composition/information on ingredients

### Mixture

Chemical properties	CAS Number	Concentration (%)
Water	7732-18-5	60-80
2-pyrrolidone	616-45-5	<20

**Composition comments** This ink supply contains an aqueous ink formulation.  
2-pyrrolidone: Specific Concentration Limit 3%.

#### 4. First aid measures

##### First aid measures for different exposure routes

<b>Inhalation</b>	Move to fresh air. If symptoms persist, get medical attention.
<b>Skin contact</b>	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
<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.

#### 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>	Not specified.
<b>Specific methods</b>	None established.

#### 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>	Not available.

#### 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.

#### 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.

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

<b>Eye/face protection</b>	Not available.
<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>	Not available.
<b>Thermal hazards</b>	Not available.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

#### 9. Physical and chemical properties

##### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Not available.
<b>Color</b>	Cyan
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>Melting point/freezing point</b>	Not determined
<b>pH</b>	8.2 - 8.7
<b>Boiling point, initial boiling point, and boiling range</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<b>Flash point</b>	> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
<b>Decomposition temperature</b>	Not available.
<b>Auto-ignition temperature</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not determined
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not determined
<b>Vapor density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Other data</b>	
<b>Oxidizing properties</b>	Not determined
<b>Percent volatile</b>	19 % estimated
<b>VOC</b>	< 306 g/L

---

## 10. Stability and reactivity

<b>Stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	None.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

---

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
<b>Skin contact</b>	Contact with skin may result in mild irritation.
<b>Eye contact</b>	Contact with eyes may result in mild irritation.
<b>Ingestion</b>	Health injuries are not known or expected under normal use.

**Symptoms** Not available.

### Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
----------------	----------------	---------------------

Cyan ink

Components	Species	Test Results
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>	Not classified as an irritant according to, OECD 405. 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>	Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium) 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, maternally toxic doses in test animals. Uptake by people of small doses is not expected to cause developmental toxicity.	
<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 Refer to Section 2 for potential health effects and Section 4 for first aid measures.	

## 12. Ecological information

### Ecotoxicity

Product	Species	Test Results
Cyan ink		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Fathead minnow (Pimephales promelas)	> 750 mg/l, 96 hours
<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

**Persistence and degradability** Not available.

### Bioaccumulation

#### Bioaccumulative potential

##### Octanol/water partition coefficient log Kow

2-pyrrolidone -0.85

**Mobility in soil** Not available.

**Other hazardous effects** Not available.

## 13. Disposal considerations

**Disposal instructions** Do not allow this material to drain into sewers/water supplies.  
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

**Residual waste** Not available.

**Contaminated packaging** Not available.

**Local disposal regulations** Not available.

## 14. Transport information

### DOT

**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**  
**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.

## 15. Regulatory information

### Applicable regulations

#### Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste

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.

#### Basel Convention

Not applicable.

---

## 16. Other information

**References** Not available.

**Issued by**

**Company name** HP Inc.

**Prepared by**

HP Inc.

**Disclaimer**

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP 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.

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

**Issue date** 04-Jul-2013

**Revision date** 30-Jan-2020

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.

**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