

CN646Series[B][4]-SDS\_HONG\_KONG-English-16.pdf

CN646Series[C][4]-SDS\_HONG\_KONG-English-16.pdf

CN646Series[M][4]-SDS\_HONG\_KONG-English-16.pdf

CN646Series[Y][4]-SDS\_HONG\_KONG-English-17.pdf



# SAFETY DATA SHEET

## 1. 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>Product identifier</b>	CN646Series[B][4]	
<b>Company identification</b>	HP Inc. Hong Kong Limited 25th Floor, Cityplaza One, 1111 King's Road Taikoo Shing, Hong Kong	
<b>Telephone</b>	852-3070 6688	
<b>HP Inc health effect line</b>		
<b>(Toll-free within 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	
<b>Telephone</b>	+85230772688	
<b>Other means of identification</b>	None.	
<b>Recommended use of the chemical and restrictions on use</b>		
<b>Recommended use</b>	Not available.	
<b>Restrictions on use</b>	Not available.	

## 2. Hazards identification

<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>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 which do not result in classification</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

### Mixtures

## Hazardous components

Chemical name	Common name and synonyms	CAS number	%
2-pyrrolidone		616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol		9014-85-1	<2.5

## Non-hazardous components

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	50-60
Glycerol		56-81-5	< 40
Pigments and/or Dyes		Proprietary	< 1

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

## 4. First-aid measures

<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/effects, acute and delayed</b>	Not available.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	CO2, water, dry chemical, or foam
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	None known.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Specific methods</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</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.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin, eyes and clothing.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

## 8. Exposure controls/personal protection

<b>Exposure limit values</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<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>	Black.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not determined
<b>Flash point</b>	>= 230.0 °F (>= 110.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<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>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Oxidizing properties</b>	Not determined
<b>Percent volatile</b>	5.28 % estimated
<b>VOC</b>	< 56.34 g/l

---

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Not available.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product emits 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 related to the physical, chemical and toxicological characteristics** Not available.

**Information on toxicological effects**

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

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Glycerol (CAS 56-81-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Guinea pig	45 ml/kg, Days
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
<b>Oral</b>		
LD50	Rat	18300 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

**ACGIH Carcinogens**

Not available.

**Controlled and Prohibited Carcinogens List**

Not available.

**Reproductive toxicity** 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.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Further information** Complete toxicity data are not available for this specific formulation

**12. Ecological information**

**Ecotoxicity**

Product	Species	Test Results
CN646Series[B][4]		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) < 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 ( <i>Daphnia pulex</i> ) 13.21 mg/l, 48 hours

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

2-pyrrolidone -0.85

**Partition coefficient n-octanol / water (log Kow)**

Glycerol

-1.76

**Mobility in soil** Not available.**Other adverse 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.**Waste from residues / unused products** Not available.**Contaminated packaging** 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****Safety, health and environmental regulations specific for the product in question****Controlled and Prohibited Carcinogens: Listed substance**

Not regulated.

**CWC. Chemical Weapons (Convention) Ordinance, Schedules of Chemicals 1-3 (L.N. 62 of 2004, as amended)**

Not regulated.

**Drug Precursors for Imports and Exports**

Not regulated.

**Drug Precursors Subject to Conditional Exports**

Not regulated.

**Listed Substances (Factories and Industrial Undertakings (Dangerous Substances) Regulations, First Schedule, as amended)**

Not regulated.

**Narcotics and Psychotropic Substances**

Not regulated.

**Ozone Depleting Substances (ODS) (Ozone Layer Protection Ordinance, Cap. 403, July 1989)**

Not regulated.

**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, including date of preparation or last revision**

**Issue date** 16-Oct-2019

**Revision date** 11-Mar-2020

**Version #** 04

**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.

**Revision information** Composition / Information on Ingredients: Ingredients

## 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





# SAFETY DATA SHEET

## 1. 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>Product identifier</b>	CN646Series[C][4]	
<b>Company identification</b>	HP Inc. Hong Kong Limited 25th Floor, Cityplaza One, 1111 King's Road Taikoo Shing, Hong Kong	
<b>Telephone</b>	852-3070 6688	
<b>HP Inc health effect line (Toll-free within 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	
<b>Telephone</b>	+85230772688	
<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>Restrictions on use</b>	Not available.	

## 2. Hazards identification

<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>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 which do not result in classification</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

### Mixtures

## Hazardous components

Chemical name	Common name and synonyms	CAS number	%
2-pyrrolidone		616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol		9014-85-1	<2.5

## Non-hazardous components

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	50-60
Glycerol		56-81-5	< 40
Substituted phthalocyanine salt #1		Proprietary	< 2.5

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

## 4. First-aid measures

<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/effects, acute and delayed</b>	Not available.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	CO2, water, dry chemical, or foam
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	None known.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Specific methods</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</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.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin, eyes and clothing.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

## 8. Exposure controls/personal protection

<b>Exposure limit values</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<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>pH</b>	9 - 10
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not determined
<b>Flash point</b>	>= 230.0 °F (>= 110.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<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>	>= 1 (air = 1.0)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Oxidizing properties</b>	Not determined
<b>Percent volatile</b>	5 % estimated
<b>VOC</b>	< 56.33 g/l

---

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Not available.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product emits 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 related to the physical, chemical and toxicological characteristics** Not available.

**Information on toxicological effects**

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

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Glycerol (CAS 56-81-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Guinea pig	45 ml/kg, Days
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
<b>Oral</b>		
LD50	Rat	18300 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

**ACGIH Carcinogens**

Not available.

**Controlled and Prohibited Carcinogens List**

Not available.

**Reproductive toxicity** 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.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Further information** Complete toxicity data are not available for this specific formulation

**12. Ecological information**

**Ecotoxicity**

Product	Species	Test Results
CN646Series[C][4]		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) < 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 ( <i>Daphnia pulex</i> ) 13.21 mg/l, 48 hours

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

2-pyrrolidone -0.85

**Partition coefficient n-octanol / water (log Kow)**

Glycerol

-1.76

Mobility in soil Not available.

Other adverse 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.

**Waste from residues / unused products** Not available.

**Contaminated packaging** 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**

**Safety, health and environmental regulations specific for the product in question**

**Controlled and Prohibited Carcinogens: Listed substance**

Not regulated.

**CWC. Chemical Weapons (Convention) Ordinance, Schedules of Chemicals 1-3 (L.N. 62 of 2004, as amended)**

Not regulated.

**Drug Precursors for Imports and Exports**

Not regulated.

**Drug Precursors Subject to Conditional Exports**

Not regulated.

**Listed Substances (Factories and Industrial Undertakings (Dangerous Substances) Regulations, First Schedule, as amended)**

Not regulated.

**Narcotics and Psychotropic Substances**

Not regulated.

**Ozone Depleting Substances (ODS) (Ozone Layer Protection Ordinance, Cap. 403, July 1989)**

Not regulated.

**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, including date of preparation or last revision**

**Issue date** 16-Oct-2019

**Revision date** 11-Mar-2020

**Version #** 04

**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.

**Revision information** Composition / Information on Ingredients: Ingredients

## 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



# SAFETY DATA SHEET

## 1. 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>Product identifier</b>	CN646Series[M][4]	
<b>Company identification</b>	HP Inc. Hong Kong Limited 25th Floor, Cityplaza One, 1111 King's Road Taikoo Shing, Hong Kong	
<b>Telephone</b>	852-3070 6688	
<b>HP Inc health effect line (Toll-free within 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	
<b>Telephone</b>	+85230772688	
<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>Restrictions on use</b>	Not available.	

## 2. Hazards identification

<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>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 which do not result in classification</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

### Mixtures



## Hazardous components

Chemical name	Common name and synonyms	CAS number	%
2-pyrrolidone		616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol		9014-85-1	<2.5

## Non-hazardous components

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	50-60
Glycerol		56-81-5	< 40
Substituted xanthylum salt #1		Proprietary	< 1

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

## 4. First-aid measures

<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/effects, acute and delayed</b>	Not available.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	CO2, water, dry chemical, or foam
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	None known.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Specific methods</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</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.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin, eyes and clothing.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

## 8. Exposure controls/personal protection

<b>Exposure limit values</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<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>	Magenta
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	9 - 10
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not determined
<b>Flash point</b>	>= 230.0 °F (>= 110.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<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>	>= 1 (air = 1.0)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Soluble in water
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Oxidizing properties</b>	Not determined
<b>Percent volatile</b>	5 % estimated
<b>VOC</b>	< 56.36 g/l

---

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Not available.
<b>Incompatible materials</b>	Incompatible with strong bases and oxidizing agents.
<b>Hazardous decomposition products</b>	Upon decomposition, this product emits 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 related to the physical, chemical and toxicological characteristics** Not available.

**Information on toxicological effects**

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

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Glycerol (CAS 56-81-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Guinea pig	45 ml/kg, Days
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
<b>Oral</b>		
LD50	Rat	18300 mg/kg
Substituted xanthylum salt #1		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	<= 10000 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

**ACGIH Carcinogens**

Not available.

**Controlled and Prohibited Carcinogens List**

Not available.

**Reproductive toxicity** 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.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Further information** Complete toxicity data are not available for this specific formulation

**12. Ecological information**

**Ecotoxicity**

Product	Species	Test Results
CN646Series[M][4]		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) < 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 ( <i>Daphnia pulex</i> ) 13.21 mg/l, 48 hours

<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulative potential</b>	Not available.
<b>Partition coefficient n-octanol / water (log Kow)</b>	
2-pyrrolidone	-0.85
Glycerol	-1.76
<b>Mobility in soil</b>	Not available.
<b>Other adverse 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. Ensure collection and disposal with an appropriately licensed waste contractor. Do not dispose of together with general office waste.
<b>Waste from residues / unused products</b>	Not available.
<b>Contaminated packaging</b>	Not available.

---

### 14. Transport information

#### DOT

<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.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No
<b>Special precautions for user</b>	Not available.

#### IATA

<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.
<b>Environmental hazards</b>	No
<b>Special precautions for user</b>	Not available.

#### IMDG

<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.
<b>Transport hazard class(es)</b>	
<b>Marine pollutant</b>	No
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Not available.

#### ADR

<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>Hazard No. (ADR)</b>	Not available.
<b>Tunnel restriction code</b>	Not available.
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	No
<b>Special precautions for user</b>	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

### Safety, health and environmental regulations specific for the product in question

#### Controlled and Prohibited Carcinogens: Listed substance

Not regulated.

#### CWC. Chemical Weapons (Convention) Ordinance, Schedules of Chemicals 1-3 (L.N. 62 of 2004, as amended)

Not regulated.

#### Drug Precursors for Imports and Exports

Not regulated.

#### Drug Precursors Subject to Conditional Exports

Not regulated.

#### Listed Substances (Factories and Industrial Undertakings (Dangerous Substances) Regulations, First Schedule, as amended)

Not regulated.

#### Narcotics and Psychotropic Substances

Not regulated.

#### Ozone Depleting Substances (ODS) (Ozone Layer Protection Ordinance, Cap. 403, July 1989)

Not regulated.

### 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, including date of preparation or last revision

**Issue date** 16-Oct-2019

**Revision date** 13-Mar-2020

**Version #** 04

**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.

**Revision information** Composition / Information on Ingredients: Ingredients

## 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



# SAFETY DATA SHEET

## 1. 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>Product identifier</b>	CN646Series[Y][4]	
<b>Company identification</b>	HP Inc. Hong Kong Limited 25th Floor, Cityplaza One, 1111 King's Road Taikoo Shing, Hong Kong	
<b>Telephone</b>	852-3070 6688	
<b>HP Inc health effect line</b>		
<b>(Toll-free within 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	
<b>Telephone</b>	+85230772688	
<b>Other means of identification</b>	None.	
<b>Recommended use of the chemical and restrictions on use</b>		
<b>Recommended use</b>	Not available.	
<b>Restrictions on use</b>	Not available.	

## 2. Hazards identification

<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>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 which do not result in classification</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

### Mixtures

## Hazardous components

Chemical name	Common name and synonyms	CAS number	%
2-pyrrolidone		616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol		9014-85-1	<2.5

## Non-hazardous components

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	50-60
Glycerol		56-81-5	< 40
Arylazopyrazolesulfonate salt #2		Proprietary	<1

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

## 4. First-aid measures

<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/effects, acute and delayed</b>	Not available.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	CO2, water, dry chemical, or foam
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	None known.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Specific methods</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</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.
<b>Environmental precautions</b>	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid contact with skin, eyes and clothing.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep out of the reach of children. Keep away from excessive heat or cold.

## 8. Exposure controls/personal protection

<b>Exposure limit values</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<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>	Yellow
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not determined
<b>Flash point</b>	>= 230.0 °F (>= 110.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<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>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Oxidizing properties</b>	Not determined
<b>Percent volatile</b>	5.84 % estimated
<b>VOC</b>	< 56.33 g/l

---

## 10. Stability and reactivity

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	Not available.
<b>Incompatible materials</b>	Not available.
<b>Hazardous decomposition products</b>	Upon decomposition, this product emits 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 related to the physical, chemical and toxicological characteristics** Not available.

#### Information on toxicological effects

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

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Glycerol (CAS 56-81-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Guinea pig	45 ml/kg, Days
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
<b>Oral</b>		
LD50	Rat	18300 mg/kg

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

#### Respiratory or skin sensitization

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

#### ACGIH Carcinogens

Not available.

#### Controlled and Prohibited Carcinogens List

Not available.

**Reproductive toxicity** 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.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

**Further information** Complete toxicity data are not available for this specific formulation

## 12. Ecological information

### Ecotoxicity

Product	Species	Test Results
CN646Series[Y][4]		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) < 750 mg/l, 96 hours
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> ) 13.21 mg/l, 48 hours

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

#### Partition coefficient n-octanol / water (log Kow)

2-pyrrolidone -0.85

**Partition coefficient n-octanol / water (log Kow)**

Glycerol

-1.76

Mobility in soil Not available.

Other adverse 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.

**Waste from residues / unused products** Not available.

**Contaminated packaging** 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****Safety, health and environmental regulations specific for the product in question****Controlled and Prohibited Carcinogens: Listed substance**

Not regulated.

**CWC. Chemical Weapons (Convention) Ordinance, Schedules of Chemicals 1-3 (L.N. 62 of 2004, as amended)**

Not regulated.

**Drug Precursors for Imports and Exports**

Not regulated.

**Drug Precursors Subject to Conditional Exports**

Not regulated.

**Listed Substances (Factories and Industrial Undertakings (Dangerous Substances) Regulations, First Schedule, as amended)**

Not regulated.

**Narcotics and Psychotropic Substances**

Not regulated.

**Ozone Depleting Substances (ODS) (Ozone Layer Protection Ordinance, Cap. 403, July 1989)**

Not regulated.

**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, including date of preparation or last revision**

**Issue date** 16-Oct-2019

**Revision date** 13-Mar-2020

**Version #** 04

**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.

**Revision information** Composition / Information on Ingredients: Ingredients  
Regulatory information: International regulations

## 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