



# Safety Data Sheet

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CN668Series[B][2]-MSDS\_JAPAN-English-42.pdf



## 1. Chemical 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 chemical (Product name)</b>	CN668Series[C][2]  HP Japan Inc. 5F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711
<b>Poison Information Centre Telephone</b>	0120-50-3024 (+81) 3 5628-1101
<b>HP Inc. health effects line (Toll-free within the US) (Direct)</b>	1-800-457-4209 1-760-710-0048
<b>HP Inc. Customer Care Line (Toll-free within the US) (Direct)</b>	1-800-474-6836 1-208-323-2551
<b>Email:</b>	hpcustomer.inquiries@hp.com
<b>Recommended use of the chemical and restrictions on use</b>	
<b>Intended use</b>	Inkjet printing

## 2. Hazards identification

<b>GHS classification</b>	
<b>Physical hazards</b>	The product is not classified according to GHS.
<b>Health hazards</b>	Reproductive toxicity (fertility, the unborn child) Category 1B
<b>Environmental hazards</b>	The product is not classified according to GHS.
<b>GHS label elements</b>	
<b>Symbols</b>	
<b>Signal words</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>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.

## 3. Composition/information on ingredients

<b>Substance or mixture</b>	Mixture
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Components	CAS Number	Gazette notification		Concentration (%)
		ENCS no.	ISHL no.	
Water	7732-18-5	(9)-447		65-75
2-pyrrolidone	616-45-5	(5)-112	(5)-112	<20
Substituted diol	Proprietary	Proprietary	Proprietary	<10
Pigment Blue	Proprietary	Proprietary	Proprietary	<2.5

**Chemical formula** H<sub>2</sub>O (7732-18-5), C<sub>4</sub>H<sub>7</sub>N-O (616-45-5), C<sub>4</sub>H<sub>7</sub>N-O (616-45-5)

**Composition comments** 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.

#### 4. First aid measures

<b>If inhaled</b>	If symptoms persist, get medical attention. Move to fresh air.
<b>If on skin</b>	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
<b>If in eyes</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>If swallowed</b>	If ingestion of a large amount does occur, seek medical attention.

#### 5. Fire-fighting measures

<b>Extinguishing media</b>	Dry chemical, CO <sub>2</sub> , water spray or regular foam. For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.
<b>Extinguishing media to avoid</b>	None known.
<b>Specific methods</b>	None established.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency measures</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>Methods or 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.

#### 7. Handling and storage

<b>Handling</b>	
<b>Technical measures (e.g. Local and general ventilation)</b>	Not available.
<b>Safe handling advice</b>	Not available.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Storage</b>	
<b>Safe storage conditions</b>	Keep out of the reach of children. Keep away from excessive heat or cold.
<b>Safe packaging materials</b>	Not available.

#### 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Exposure guidelines</b>	Exposure limits have not been established for this product.
<b>Engineering measures</b>	Use in a well ventilated area.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	Not available.
<b>Hand protection</b>	Not available.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Personal protective equipment</b>	
<b>Eye protection</b>	Not available.
<b>Skin and body protection</b>	Use personal protective equipment to minimize exposure to skin and eye.

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## 9. Physical and chemical properties

### Appearance

Physical state	Liquid.
Color	Cyan
Odor	Not available.
pH	9
Melting point/Freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	1 k/L
<b>Solubility(ies)</b>	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity (Coefficient of viscosity)	Not available.
<b>Other information</b>	
Oxidizing properties	Not determined
Percent volatile	16 % estimated
VOC	246 g/l (Determined by EPA Method 24)

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## 10. Stability and reactivity

Reactivity	Not available.
Chemical 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

Acute toxicity	Based on available data, the classification criteria are not met.	
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	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>		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	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 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>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

### Ecotoxicological data

Product	Species	Test Results
CN668Series[C][2]		
<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
<b>Ecotoxicity</b>	No information available.	
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulation</b>	Not available.	
<b>Bioaccumulative potential</b>		
<b>Octanol/water partition coefficient log Kow</b>		
2-pyrrolidone		-0.85
<b>Mobility in soil</b>	Not available.	
<b>Hazardous to the ozone layer</b>	Not available.	

## 13. Disposal considerations

<b>Local disposal regulations</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.
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## 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>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**

**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****Industrial Safety and Health Act**

**Notifiable substances**  
 Not regulated.  
**Labeling substances**  
 Not regulated.

**Poisonous and Deleterious Substances Control Act**

**Specified poisonous substances**  
 Not regulated.  
**Poisonous substances**  
 Not regulated.  
**Deleterious substances**  
 Not regulated.

**Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.**

**Class I specified chemical substances**  
 Not regulated.  
**Class II specified chemical substances**  
 Not regulated.  
**Monitoring chemical substances**  
 Not regulated.  
**Priority Assessment Chemical Substances (PACs)**  
 Not regulated.  
**Reporting Exempted Substances**  
 Not regulated.

**Law concerning Pollutant Release and Transfer Register**

**Specified class 1 substances (substance name, ordinance number and content)**  
 Not regulated.  
**Class 1 substances (substance name, ordinance number and content)**  
 Not regulated.  
**Class 2 substances (substance name, ordinance number and content)**  
 Not regulated.

**Fire Service Act** Class 4 Group 3 oils (Non-water soluble) Hazard rank III

**Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule** Not regulated.

**Air Law, Enforcement Rule** Not regulated.

**Explosives Control Act**

Not regulated.

**Act on Prevention of Marine Pollution and Maritime Disaster**

WATER

Substituted diol

Substituted diol

Category: Other Substances

Category: Z

Category: Z

**Regulatory information**

All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

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**16. Other information**

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**

1. Product and Company Identification: Alternate Trade Names  
Hazards identification: Supplemental information  
Composition/information on ingredients: Composition comments  
Toxicological information: Reproductivity

**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



## 1. Chemical 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 chemical (Product name)</b>	CN668Series[B][2]  HP Japan Inc. 5F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711
<b>Poison Information Centre Telephone</b>	0120-50-3024 (+81) 3 5628-1101
<b>HP Inc. health effects line (Toll-free within the US) (Direct)</b>	1-800-457-4209 1-760-710-0048
<b>HP Inc. Customer Care Line (Toll-free within the US) (Direct)</b>	1-800-474-6836 1-208-323-2551
<b>Email:</b>	hpcustomer.inquiries@hp.com
<b>Recommended use of the chemical and restrictions on use</b>	
<b>Intended use</b>	Inkjet printing.

## 2. Hazards identification

<b>GHS classification</b>	
<b>Physical hazards</b>	The product is not classified according to GHS.
<b>Health hazards</b>	Reproductive toxicity (fertility, the unborn child) Category 1B
<b>Environmental hazards</b>	The product is not classified according to GHS.
<b>GHS label elements</b>	
<b>Symbols</b>	
<b>Signal words</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>	Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA. Potential routes of overexposure to this product are skin and eye contact. Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Complete toxicity data are not available for this specific formulation.
<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.



### 3. Composition/information on ingredients

Substance or mixture	Mixture			
		Gazette notification		
Components	CAS Number	ENCS no.	ISHL no.	Concentration (%)
Water	7732-18-5	(9)-447		60-70
2-pyrrolidone	616-45-5	(5)-112	(5)-112	<20
Substituted diol	Proprietary	Proprietary	Proprietary	<10
Black Pigment	Proprietary	Proprietary	Proprietary	<2.5
Chemical formula	H2O (7732-18-5), C4-H7-N-O (616-45-5), C4-H7-N-O (616-45-5)			
Composition comments	This ink supply contains an aqueous ink formulation.  Carbon black is present only in a bound form in this preparation.  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.			

### 4. First aid measures

If inhaled	Remove to fresh air. If symptoms persist, get medical attention.
If on skin	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
If in eyes	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.
If swallowed	If ingestion of a large amount does occur, seek medical attention.

### 5. Fire-fighting measures

Extinguishing media	Dry chemical, CO2, water spray or regular foam.
Extinguishing media to avoid	None known.
Specific methods	None established.

### 6. Accidental release measures

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

### 7. Handling and storage

Handling	
Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Storage	
Safe storage conditions	Keep out of the reach of children. Keep away from excessive heat or cold.
Safe packaging materials	Not available.

### 8. Exposure controls/personal protection

#### Occupational exposure limits

#### Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value	Form
Black Pigment	TWA	4 mg/m3	Total dust.
		1 mg/m3	Respirable dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m3	Inhalable fraction.

<b>Exposure guidelines</b>	Exposure limits have not been established for this product.
<b>Personal protective equipment</b>	
<b>Respiratory protection</b>	Not available.
<b>Hand protection</b>	Not available.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Personal protective equipment</b>	
<b>Eye protection</b>	Not available.
<b>Skin and body protection</b>	Use personal protective equipment to minimize exposure to skin and eye.

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## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Color</b>	Black.

**Odor** Not available.

**pH** 9

**Melting point/Freezing point** Not available.

**Boiling point, initial boiling point, and boiling range** Not available.

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

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

**Vapor pressure** Not available.

**Vapor density** Not available.

**Specific gravity** 1 k/L

### Solubility(ies)

**Solubility (water)** Not available.

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

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity (Coefficient of viscosity)** Not available.

### Other information

<b>Oxidizing properties</b>	Not determined
<b>Percent volatile</b>	16 % estimated
<b>VOC</b>	256 g/l (Determined by EPA Method 24)

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## 10. Stability and reactivity

**Reactivity** Not available.

**Chemical stability** Stable under recommended storage conditions.

**Possibility of hazardous reactions** None known.

**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., fluorinated hydrocarbons and hydrogen fluoride.

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## 11. Toxicological information

**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
Black Pigment		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 10000 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. Not classified as an irritant according to, OECD 405.	
<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. Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)	
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.	
	Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.	
<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>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

Ecotoxicological data		
Product	Species	Test Results
CN668Series[B][2]		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia pulex) 13.21 mg/l, 48 hours
<b>Ecotoxicity</b>	No information available.	
<b>Persistence and degradability</b>	Not available.	
<b>Bioaccumulation</b>	Not available.	
<b>Bioaccumulative potential</b>		
<b>Octanol/water partition coefficient log Kow</b>		
2-pyrrolidone		-0.85
<b>Mobility in soil</b>	Not available.	
<b>Hazardous to the ozone layer</b>	Not available.	

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### 13. Disposal considerations

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

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### 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.  
**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

#### Industrial Safety and Health Act

**Notifiable substances**

Not regulated.

**Labeling substances**

CARBONBLACK

0 - 2.5 %

#### Poisonous and Deleterious Substances Control Act

**Specified poisonous substances**

Not regulated.

**Poisonous substances**

Not regulated.

**Deleterious substances**

Not regulated.

#### Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

**Class I specified chemical substances**

Not regulated.

**Class II specified chemical substances**

Not regulated.

**Monitoring chemical substances**

Not regulated.

**Priority Assessment Chemical Substances (PACs)**

Not regulated.

**Reporting Exempted Substances**

Not regulated.

**Law concerning Pollutant Release and Transfer Register****Specified class 1 substances (substance name, ordinance number and content)**

Not regulated.

**Class 1 substances (substance name, ordinance number and content)**

Not regulated.

**Class 2 substances (substance name, ordinance number and content)**

Not regulated.

**Fire Service Act**

Class 4 Group 3 oils (Non-water soluble) Hazard rank III

**Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule**

Not regulated.

**Air Law, Enforcement Rule**

Not regulated.

**Explosives Control Act**

Not regulated.

**Act on Prevention of Marine Pollution and Maritime Disaster**

WATER

Category: Other Substances

Substituted diol

Category: Z

Substituted diol

Category: Z

**Regulatory information**

All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

**16. Other information**

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**

1. Product and Company Identification: Alternate Trade Names  
 Hazards identification: Supplemental information  
 Composition/information on ingredients: Composition comments  
 Toxicological information: Reproductivity

## 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