



# 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>	CR334Series	
<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.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
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## 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>		
H360	May damage fertility or the unborn child.	
<b>Precautionary statement</b>		
<b>Prevention</b>		
P280	Wear protective gloves/protective clothing/eye protection.	
P202	Do not handle until all safety precautions have been read and understood.	
P201	Obtain special instructions before use.	
<b>Response</b>		
P308 + P313	IF exposed or concerned: Get medical advice/attention.	
<b>Storage</b>		
P405	Store locked up.	
<b>Disposal</b>		
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	

**Other hazards which do not result in classification**

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.

**Supplemental information**

2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

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**3. Composition/information on ingredients****Mixtures****Hazardous components**

Chemical name	Common name and synonyms	CAS number	%
2-pyrrolidone		616-45-5	<15

**Non-hazardous components**

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	50-70
Substituted diol		Proprietary	<15
Black Pigment		Proprietary	<2.5

**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.

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**4. First-aid measures****Inhalation**

Move to fresh air. If symptoms persist, get medical attention.

**Skin contact**

Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

**Eye contact**

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.

**Ingestion**

If ingestion of a large amount does occur, seek medical attention.

**Most important symptoms/effects, acute and delayed**

Not available.

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**5. Fire-fighting measures****Suitable extinguishing media**

CO2, water, dry chemical, or 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.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

Not applicable.

**Special protective equipment and precautions for firefighters**

Not available.

**Specific methods**

None established.

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**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear appropriate personal protective equipment.

**Methods and 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.

**Environmental precautions**

Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

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**7. Handling and storage****Precautions for safe handling**

Avoid contact with skin, eyes and clothing.

**Conditions for safe storage, including any incompatibilities**

Keep out of the reach of children. Keep away from excessive heat or cold.

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## 8. Exposure controls/personal protection

### Exposure limit values

#### Hong Kong. OELs. (Occupational Exposure Limits for Chemical Substances in the Work Environment)

Components	Type	Value
Black Pigment	TWA	3.5 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Black Pigment	TWA	3 mg/m <sup>3</sup>	Inhalable fraction.

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Exposure limits have not been established for this product.

### Appropriate engineering controls

Use in a well ventilated area.

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

**Eye/face protection** Not available.

#### Skin protection

**Hand protection** Not available.

#### Other

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

**Respiratory protection** Not available.

**Thermal hazards** Not available.

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Under extreme work place conditions, ink vapors may condense outside of the printing system. The Waste Profile Datasheet for your printer at <https://hpllatexknowledgecenter.com/applications/wasteprofiles> contains more information on how to properly handle and dispose of the condensate.

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## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Not available.

**Color** Black.

**Odor** Not available.

**Odor threshold** Not available.

**pH** 9

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

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

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

### Upper/lower flammability or explosive limits

**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.

### Solubility(ies)

**Solubility (water)** Not available.

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

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Other information**

Percent volatile	14 % estimated
Specific gravity	1 g/cm <sup>3</sup>
VOC	294 g/l Method 24/ASTM D403-93

**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 may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons., hydrogen fluoride, fluorinated 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.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
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2-pyrrolidone (CAS 616-45-5)

**Acute****Oral**

LD50	Rat	> 5000 mg/kg
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Black Pigment

**Acute****Oral**

LD50	Rat	> 10000 mg/kg
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**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. Not classified as an irritant according to, OECD 405.

**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. Negative, does not indicate mutagenic potential (Ames Test: Salmonella typhimurium)

**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 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).

**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.

<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Further information</b>	Complete toxicity data are not available for this specific formulation Refer to Section 2 for potential health effects and Section 4 for first aid measures.

## 12. Ecological information

### Ecotoxicity

Product	Species	Test Results
CR334Series		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50 Fathead minnow ( <i>Pimephales promelas</i> )	< 531.3 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

**Mobility in soil** Not available.

**Other adverse effects** Not available.

## 13. Disposal considerations

<b>Disposal instructions</b>	Do not dispose of together with general office waste. 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. HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a> .
<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>	None
<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.

**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** None  
**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

### 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.

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## 16. Other information, including date of preparation or last revision

**Issue date** 12-Jan-2018

**Revision date** 19-Jun-2020

**Version #** 05

**Disclaimer**

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**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