



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** 51600C Rev B  
**Other means of identification** None.

### Recommended use of the chemical and restrictions on use

**Recommended use** Inkjet printing  
**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

HP Singapore (Private) Limited  
1 Depot Close  
Singapore, 109841

**Telephone** 62753888

### HP Inc. health effects line

**(Toll-free within the US)** 1-800-457-4209  
**(Direct)** 1-760-710-0048

### HP Inc. Customer Care Line

**(Toll-free within the US)** 1-800-474-6836  
**(Direct)** 1-208-323-2551

**Email:** hpcustomer.inquiries@hp.com

## 2. Hazards identification

### GHS classification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Sensitization, skin	Category 1
	Reproductive toxicity (fertility, the unborn child)	Category 1B
	Specific target organ toxicity, repeated exposure	Category 2 (kidney)
<b>Environmental hazards</b>	Not classified.	

### GHS label elements, including precautionary statements

#### Pictograms



**Signal word** Danger

**Hazard statements** May cause an allergic skin reaction. May cause damage to organs (kidney) through prolonged or repeated exposure. May damage fertility or the unborn child.

#### Precautionary statement

**Prevention** Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not breathe mist or vapor.

**Response** IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Get medical attention/advice if you feel unwell. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

**Storage** Not available.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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.

**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.

---

**3. Composition/information on ingredients**

Substance or mixture	Mixture		
Chemical name	Common name and synonyms	CAS Number	Concentration (%)
Water		7732-18-5	30-40
2-pyrrolidone		616-45-5	<30
Ethylene glycol		107-21-1	<25
Alkyldiol		Proprietary	<7.5
Food Black 2 acid salt # 3	Food Black 2 acid salt # 3	Proprietary	<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>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. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
<b>Ingestion</b>	If ingestion of a large amount does occur, seek medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.
<b>Indication of immediate medical attention and special treatment needed</b>	Not available.

---

**5. Fire-fighting measures**

<b>Suitable extinguishing media</b>	Dry chemical, CO2, water spray or regular foam.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Not available.
<b>Special protective equipment and precautions for firefighters</b>	Not available.
<b>Specific methods</b>	None established.

---

**6. Accidental release measures**

<b>Personal precautions, protective equipment and emergency procedures</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 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.

---

**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

### Occupational exposure limits

Singapore. PELs. (Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	127 mg/m3
		50 ppm

### Control parameters/Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol.

**Exposure guidelines** Exposure limits have not been established for this product.

**Appropriate engineering control measures** Use in a well ventilated area.

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

**Eye/face protection** Not available.

#### Skin protection

**Hand protection** Recommended gloves: Nitrile 4 mil minimum thickness.

**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.

---

## 9. Physical and chemical properties

<b>Appearance</b>	Liquid.
<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>	7 - 7.4
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not determined
<b>Flash point</b>	> 200.0 °F (> 93.3 °C) Closed Cup EPA Method 1020
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not available.
<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 available.
<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 data</b>	
<b>Percent volatile</b>	25 % estimated
<b>VOC</b>	< 578 g/l Estimated

## 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.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Inhalation may result in mild irritation to the respiratory system.
<b>Skin contact</b>	May cause sensitization by skin contact.
<b>Eye contact</b>	Contact with eyes may result in mild irritation.
<b>Ingestion</b>	Ingestion is not a likely route of exposure.

**Acute toxicity** Based on available data, the classification criteria are not met.  
LD50/oral/rat >2500 mg/kg (OECD 401).

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Ethylene glycol (CAS 107-21-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	9530 mg/kg
<b>Inhalation</b>		
<i>Aerosol</i>		
LC50	Rat	> 2.5 mg/l, 6 Hours
<b>Other</b>		
LD50	Rat	2800 mg/kg

**Symptoms** Not available.

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.  
Non irritant in rabbit (OECD 404)

**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

<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	May cause sensitization by skin contact.

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

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

**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** May cause damage to organs (kidney) through prolonged or repeated exposure by ingestion.

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

**Chronic effects** Not available.

**Other information** 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
51600C Rev B		
<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.

Octanol/water partition coefficient log Kow	
2-pyrrolidone	-0.85
Ethylene glycol	-1.36

**Mobility in soil** Not available.

**Other adverse effects** Not available.

## 13. Disposal considerations

**Disposal methods/information** 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.

**Special precautions** 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

**Transport hazard class(es)**

<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****Chemical Weapons Prohibition (Act)**

Not applicable.

**Controlled Narcotic Drugs (Misuse of Drugs Act, First Schedule, Part I, II & III)**

Not regulated.

**Controlled Specified Drugs (Misuse of Drugs Act, Fourth Schedule)**

Not regulated.

**Environmental Protection and Management (Hazardous Substances) Regulations**

Not applicable.

**Environmental Public Health Act**

Not applicable.

**Prior Informed Consent (PIC) Substances (Environment Protection and Management Act, 2nd Schedule, Part 1, Jul. 1, 2013)**

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.

**Montreal Protocol**

Not applicable.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Basel Convention**

Not applicable.

---

**16. Other information**

**References** Not available.

**Issued by**

**Company name** HP Inc.

**Prepared by**

HP Inc.

**Disclaimer**

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

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

**Issue date**

21-May-2015

**Revision date**

01-Jun-2020

**Key/legend**

Not applicable.

**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