



# 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>	51605R Rev B	
<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
	Specific target organ toxicity, repeated exposure	Category 2 (kidney)
<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.	
H373	May cause damage to organs (kidney) through prolonged or repeated exposure.	
<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.	
P260	Do not breathe mist or vapor.	
<b>Response</b>		
P314	Get medical attention/advice if you feel unwell.	
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**

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**

Complete toxicity data are not available for this specific formulation.

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****Mixtures****Hazardous components**

Chemical name	Common name and synonyms	CAS number	%
2-pyrrolidone		616-45-5	<30
Ethylene glycol		107-21-1	<30
Alkyldiol		Proprietary	<7.5
Acid Yellow 23 Tetramethylammonium Salt		Proprietary	<2.5

**Non-hazardous components**

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	40-50

**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****Inhalation**

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

**Skin contact**

Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

**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.

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

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**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.

**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.

**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.

## 8. Exposure controls/personal protection

### Exposure limit values

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

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

#### US. ACGIH Threshold Limit Values

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

### 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** 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

### Appearance

liquid

#### Physical state

Liquid.

#### Form

Not available.

#### Color

Red, Magenta

### Odor

Not available.

### Odor threshold

Not available.

### pH

7 - 7.4

### Melting point/freezing point

Not available.

### Initial boiling point and boiling range

Not determined

### Flash point

338.0 - 347.0 °F (170.0 - 175.0 °C) Closed Cup EPA Method 1020

### Evaporation rate

Not determined

### Flammability (solid, gas)

Not available.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not determined

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

### Vapor pressure

Not determined

### Vapor density

>= 1 (air = 1.0)

### Solubility(ies)

**Solubility (water)** Soluble in water

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

Not available.

### Auto-ignition temperature

Not available.

### Decomposition temperature

Not available.

### Viscosity

>= 2 cp

### Other information

**Oxidizing properties** Not determined

Percent volatile	25 % estimated
VOC	< 578 g/l Estimated

## 10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	Not available.
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.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Inhalation may result in mild irritation to the respiratory system.
Skin contact	Contact with skin may result in mild irritation.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Ingestion is not a likely route of exposure.

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. LD50/oral/rat >2500 mg/kg (OECD 401).

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Acid Yellow 23 Tetramethylammonium Salt		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	2000 mg/kg
<b>Oral</b>		
LD50	Rat	81 mg/kg
<b>Chronic</b>		
<b>Oral</b>		
NOAEL	Rat	1 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
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.	
<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.	
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**

Ethylene glycol (CAS 107-21-1)

A4 Not classifiable as a human carcinogen.

**Controlled and Prohibited Carcinogens List**

Not available.

<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>	May cause damage to organs (kidney) through prolonged or repeated exposure by ingestion.
<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
51605R Rev B		
<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
Acid Yellow 23 Tetramethylammonium Salt		
<b>Aquatic</b>		
Algae	IC50	Algae <= 100 mg/l, 72 Hours
Crustacea	EC50	Daphnia 30 mg/l, 48 Hours
Fish	LC50	Fish 1000 mg/l, 96 Hours

**Persistence and degradability** Not available.**Bioaccumulative potential** Not available.**Partition coefficient n-octanol / water (log Kow)**

2-pyrrolidone	-0.85
Ethylene glycol	-1.36

**Mobility in soil** Not available.**Other adverse effects** Not available.**13. Disposal considerations**

**Disposal instructions** 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.

**Waste from residues / unused products** Not available.**Contaminated packaging** 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.
<b>IATA</b>	
<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.
<b>IMDG</b>	
<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.
<b>ADR</b>	
<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>	None
<b>Special precautions for user</b>	Not available.
<b>Further information</b>	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)

Ethylene glycol (CAS 107-21-1)

#### 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** 15-Jul-2017**Revision date** 29-May-2020**Version #** 07**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.

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**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