



SAFETY DATA SHEET

1. Identification

Important information	*** 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. ***	
Product identifier	51605B Rev B	
Other means of identification	None.	
Recommended use of the chemical and restrictions on use		
Recommended use	Inkjet printing	
Restrictions on use	Not available.	
Details of manufacturer or importer		
	HP PPS Australia Pty Ltd 353 Burwood Hwy L1 Forest Hill, Victoria, Australia 3131	
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. Hazard(s) identification

Classification of the hazardous chemical

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

Label elements, including precautionary statements

Hazard symbol(s)



Health hazard

Signal word

Danger

Hazard statement(s)

May damage fertility or the unborn child. May cause damage to organs (kidney) through prolonged or repeated exposure.

Precautionary statement(s)

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

Get medical attention/advice if you feel unwell. IF exposed or concerned: Get medical advice/attention.

Storage

Store locked up.

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.

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**Mixture**

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Water	7732-18-5	40-50
Ethylene glycol	107-21-1	<30
2-pyrrolidone	616-45-5	<20
Alkyldiol	Proprietary	<7.5
Substituted triphenylmethane salt #1	Proprietary	<2.5
Substituted xanthylium salt #1	Proprietary	<2.5

Composition comments

This ink supply contains an aqueous ink formulation.

This product was evaluated according to the criteria of the Australia Work Health and Safety Regulations (WHS Regulations). 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**Description of necessary 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.

Personal protection for first-aid responders Not available.

Symptoms caused by exposure Not available.

Medical attention and special treatment Not available.

5. Fire-fighting measures**Extinguishing media**

Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical Not available.

Special protective equipment and precautions for fire fighters Not available.

Hazchem code None.

Specific methods None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate personal protective equipment.

For emergency responders Not available.

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

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.

Other issues relating to spills and releases Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container.

Dispose of in compliance with federal, state, and local regulations.
See also section 13 Disposal considerations.

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 and personal protection

Control parameters

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	40 ppm
		10 mg/m ³
		20 ppm

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³	Vapor.
	TWA	40 ppm	Vapor.
		52 mg/m ³	Vapor.
		10 mg/m ³	Particulate.
		20 ppm	Vapor.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m ³	Aerosol.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³	Vapor.
	TWA	40 ppm	Vapor.
		52 mg/m ³	Vapor.
		10 mg/m ³	Particulate.
		20 ppm	Vapor.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	TWA	26 mg/m ³	Vapor and aerosol.
		10 ppm	Vapor and aerosol.

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

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

Australia OELs: Skin designation

Ethylene glycol (CAS 107-21-1) Can be absorbed through the skin.

Appropriate engineering controls Use in a well ventilated area.

Individual protection measures, for example personal protective equipment (PPE)

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.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Not available.

Color Cyan, Blue

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 physical and chemical parameters

Oxidizing properties	Not determined
Percent volatile	15.84 % estimated
VOC	< 458 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 possible 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 exposure Not available.

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)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
Ethylene glycol (CAS 107-21-1)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	9530 mg/kg
Inhalation		
<i>Aerosol</i>		
LC50	Rat	> 2.5 mg/l, 6 Hours
Other		
LD50	Rat	2800 mg/kg
Substituted xanthylum salt #1		
<u>Acute</u>		
Oral		
LD50	Rat	<= 10000 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met. Non irritant in rabbit (OECD 404)	
Serious eye damage/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.	
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.

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.

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**Aquatic toxicity**

This product has not been tested for ecological effects.

Ecotoxicity**Components****Species****Test Results**

2-pyrrolidone (CAS 616-45-5)

Aquatic

Crustacea

EC50

Water flea (*Daphnia pulex*)

13.21 mg/l, 48 hours

Persistence and degradability

Not available.

Bioaccumulative potential**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 methods**

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.

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 None
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 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.

15. Regulatory information

Safety, health and environmental regulations

National regulations

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Ethylene glycol (CAS 107-21-1)

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 10

Ethylene glycol (CAS 107-21-1)

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Ethylene glycol (CAS 107-21-1)

Australia Medicines & Poisons Schedule 6

Ethylene glycol (CAS 107-21-1)

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

Australia National Pollutant Inventory (NPI): Threshold quantity

Ethylene glycol (CAS 107-21-1)

10 TONNES/YR Threshold Category: 1

High Volume Industrial Chemicals (HVIC)

Ethylene glycol (CAS 107-21-1)

10000 - 99999 TONNES See the regulation for additional information.

Water (CAS 7732-18-5)

1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Deleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

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.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information**Issue date**

12-Jul-2017

Revision date

29-May-2020

Other information

This SDS was prepared in compliance with the NOHSC document "National Code of Practice for the Preparation of Material Safety Data Sheets", 2003.

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.

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-Term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds