

CN646Series[B][4]-SDS_AUSTRALIA-English-16.pdf

CN646Series[C][4]-SDS_AUSTRALIA-English-16.pdf

CN646Series[M][4]-SDS_AUSTRALIA-English-16.pdf

CN646Series[Y][4]-SDS_AUSTRALIA-English-17.pdf



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	CN646Series[B][4]	
Other means of identification	None.	
Recommended use of the chemical and restrictions on use		
Recommended use	Not available.	
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
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.

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.
Response	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 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.

GHS Supplemental information Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction. 2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Water	7732-18-5	50-60
Glycerol	56-81-5	< 40
2-pyrrolidone	616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol	9014-85-1	<2.5
Pigments and/or Dyes	Proprietary	< 1

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%.

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. 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.

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 CO2, water, dry chemical, or 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 Wear self contained breathing apparatus for fire fighting if necessary.

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	Form
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Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Inhalable mist.
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Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
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Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Inspirable dust.
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UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
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Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Mist.
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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
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Glycerol (CAS 56-81-5)	TWA	200 mg/m ³	Inhalable fraction.
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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, for example personal protective equipment (PPE)

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.

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	Black.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not determined

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

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	Not available.
Solubility(ies)	
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other physical and chemical parameters	
Oxidizing properties	Not determined
Percent volatile	5.28 % estimated
VOC	< 56.34 g/l

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 emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on possible routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Contact with skin may result in mild irritation.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Health injuries are not known or expected under normal use.

Symptoms related to exposure Not available.

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Glycerol (CAS 56-81-5)		
Acute		
Dermal		
LD50	Guinea pig	45 ml/kg, Days

Components	Species	Test Results
Inhalation		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
Oral		
LD50	Rat	18300 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/irritation	Based on available data, the classification criteria are not met.	
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.	
Reproductive toxicity	May damage fertility or the unborn child.	
	2-pyrrolidone: This component showed developmental effects only at high, maternally toxic doses in test animals. Uptake by people of small doses is not expected to cause developmental toxicity.	
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.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Other information	Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicity

Product	Species	Test Results
CN646Series[B][4]		
Aquatic		
<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)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)		
2-pyrrolidone	-0.85	
Glycerol	-1.76	
Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Disposal considerations

Disposal methods	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. 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 http://www.hp.com/recycle .
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14. Transport information

DOT

UN number	Not available.
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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 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.

15. Regulatory information

Safety, health and environmental regulations

National regulations

High Volume Industrial Chemicals (HVIC)

Glycerol (CAS 56-81-5) 1000 - 9999 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 16-Oct-2019

Revision date 11-Mar-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.

Revision information Hazard(s) identification: GHS Supplemental information
Composition / Information on Ingredients: Ingredients

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



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	CN646Series[C][4]	
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
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.
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.
Response	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	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.
GHS Supplemental information	Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction. 2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Water	7732-18-5	50-60
Glycerol	56-81-5	< 40
2-pyrrolidone	616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol	9014-85-1	<2.5
Substituted phthalocyanine 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%.
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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. 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.
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	CO2, water, dry chemical, or 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	Wear self contained breathing apparatus for fire fighting if necessary.

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	Form
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Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Inhalable mist.
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Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
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Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Inspirable dust.
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UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Mist.
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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
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	200 mg/m3	Inhalable fraction.
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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, for example personal protective equipment (PPE)

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.

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

Odor Not available.

Odor threshold Not available.

pH 9 - 10

Melting point/freezing point Not available.

Initial boiling point and boiling range Not determined

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

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 Not available.

Other physical and chemical parameters

Oxidizing properties Not determined

Percent volatile 5 % estimated

VOC < 56.33 g/l

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 emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on possible routes of exposure

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact Contact with skin may result in mild irritation.

Eye contact Contact with eyes may result in mild irritation.

Ingestion Health injuries are not known or expected under normal use.

Symptoms related to exposure Not available.

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
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2-pyrrolidone (CAS 616-45-5)

Acute

Oral

LD50

Rat

> 5000 mg/kg

Glycerol (CAS 56-81-5)

Acute

Dermal

LD50

Guinea pig

45 ml/kg, Days

Components	Species	Test Results
Inhalation		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
Oral		
LD50	Rat	18300 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/irritation	Based on available data, the classification criteria are not met.	
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.	
Reproductive toxicity	May damage fertility or the unborn child.	
	2-pyrrolidone: This component showed developmental effects only at high, maternally toxic doses in test animals. Uptake by people of small doses is not expected to cause developmental toxicity.	
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.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Other information	Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicity

Product	Species	Test Results
CN646Series[C][4]		
Aquatic		
<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)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)		
2-pyrrolidone	-0.85	
Glycerol	-1.76	
Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Disposal considerations

Disposal methods	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. 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 http://www.hp.com/recycle .
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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.
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 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.

15. Regulatory information

Safety, health and environmental regulations

National regulations

High Volume Industrial Chemicals (HVIC)

Glycerol (CAS 56-81-5) 1000 - 9999 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 16-Oct-2019

Revision date 11-Mar-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.

Revision information Hazard(s) identification: GHS Supplemental information
Composition / Information on Ingredients: Ingredients

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



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	CN646Series[M][4]	
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
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.

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.
Response	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 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.

GHS Supplemental information Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction. 2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Water	7732-18-5	50-60
Glycerol	56-81-5	< 40
2-pyrrolidone	616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol	9014-85-1	<2.5
Substituted xanthylum salt #1	Proprietary	< 1

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%.

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. 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.

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 CO2, water, dry chemical, or 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 Wear self contained breathing apparatus for fire fighting if necessary.

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	Form
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Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Inhalable mist.
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Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Inspirable dust.
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UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	10 mg/m3	Mist.
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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
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	200 mg/m3	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, for example personal protective equipment (PPE)

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.

Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
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9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Not available.
Color	Magenta

Odor Not available.

Odor threshold Not available.

pH 9 - 10

Melting point/freezing point Not available.

Initial boiling point and boiling range Not determined

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

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 Not available.

Other physical and chemical parameters

Oxidizing properties Not determined

Percent volatile 5 % estimated

VOC < 56.36 g/l

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 emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on possible routes of exposure

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact Contact with skin may result in mild irritation.

Eye contact Contact with eyes may result in mild irritation.

Ingestion Health injuries are not known or expected under normal use.

Symptoms related to exposure Not available.

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
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2-pyrrolidone (CAS 616-45-5)

Acute

Oral

LD50	Rat	> 5000 mg/kg
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Glycerol (CAS 56-81-5)

Acute

Dermal

LD50	Guinea pig	45 ml/kg, Days
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Components	Species	Test Results
Inhalation		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
Oral		
LD50	Rat	18300 mg/kg
Substituted xanthylum salt #1		
Acute		
Oral		
LD50	Rat	<= 10000 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/irritation	Based on available data, the classification criteria are not met.	
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.	
Reproductive toxicity	May damage fertility or the unborn child.	
	2-pyrrolidone: This component showed developmental effects only at high, maternally toxic doses in test animals. Uptake by people of small doses is not expected to cause developmental toxicity.	
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.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Other information	Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicity

Product	Species	Test Results
CN646Series[M][4]		
Aquatic		
<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)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)		
2-pyrrolidone	-0.85	
Glycerol	-1.76	
Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Disposal considerations

Disposal methods	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. Do not dispose of together with general office waste.
	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 http://www.hp.com/recycle .

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	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.

15. Regulatory information

Safety, health and environmental regulations

National regulations

High Volume Industrial Chemicals (HVIC)

Glycerol (CAS 56-81-5)

1000 - 9999 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**

16-Oct-2019

Revision date

12-Mar-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.

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Revision information

Hazard(s) identification: GHS Supplemental information
Composition / Information on Ingredients: Ingredients

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



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	CN646Series[Y][4]	
Other means of identification	None.	
Recommended use of the chemical and restrictions on use		
Recommended use	Not available.	
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
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.

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.
Response	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	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.
GHS Supplemental information	Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction. 2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Water	7732-18-5	50-60
Glycerol	56-81-5	< 40
2-pyrrolidone	616-45-5	< 7.5
ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol	9014-85-1	<2.5
Arylazopyrazolesulfonate salt #2	Proprietary	<1

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%.
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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. 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.
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	CO2, water, dry chemical, or 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	Wear self contained breathing apparatus for fire fighting if necessary.

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	Form
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Inhalable mist.
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Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

Components	Type	Value	Form
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Inspirable dust.
------------------------	-----	----------------------	------------------

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	10 mg/m ³	Mist.
------------------------	-----	----------------------	-------

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
------------	------	-------	------

Glycerol (CAS 56-81-5)	TWA	200 mg/m ³	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, for example personal protective equipment (PPE)

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.

Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
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9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Not available.
Color	Yellow

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not determined

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

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	Not available.
Solubility(ies)	
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other physical and chemical parameters	
Oxidizing properties	Not determined
Percent volatile	5.84 % estimated
VOC	< 56.33 g/l

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	Not available.
Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on possible routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Contact with skin may result in mild irritation.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Health injuries are not known or expected under normal use.

Symptoms related to exposure Not available.

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg
Glycerol (CAS 56-81-5)		
Acute		
Dermal		
LD50	Guinea pig	45 ml/kg, Days

Components	Species	Test Results
Inhalation		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
Oral		
LD50	Rat	18300 mg/kg
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/irritation	Based on available data, the classification criteria are not met.	
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.	
Reproductive toxicity	May damage fertility or the unborn child.	
	2-pyrrolidone: This component showed developmental effects only at high, maternally toxic doses in test animals. Uptake by people of small doses is not expected to cause developmental toxicity.	
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.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Other information	Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicity

Product	Species	Test Results
CN646Series[Y][4]		
Aquatic		
<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)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)		
2-pyrrolidone	-0.85	
Glycerol	-1.76	
Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Disposal considerations

Disposal methods	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. 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 http://www.hp.com/recycle .
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14. Transport information

DOT

UN number	Not available.
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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 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.

15. Regulatory information

Safety, health and environmental regulations

National regulations

High Volume Industrial Chemicals (HVIC)

Glycerol (CAS 56-81-5) 1000 - 9999 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 16-Oct-2019

Revision date 12-Mar-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.

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Revision information Hazard(s) identification: GHS Supplemental information
Composition / Information on Ingredients: Ingredients
Regulatory information: International regulations

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