

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier Trade name or designation of the mixture	CN046Series
Registration number	_
Synonyms	None.
Issue date	01-Apr-2015
Version number	05
Revision date	06-May-2016
Supersedes date	05-Nov-2015
-	f the substance or mixture and uses advised against
Identified uses	Inkjet printing
Uses advised against	None known.
Company identification	HP Inc UK Limited Cain Rd., Amen Corner, Pt 2nd Floor (Bldg BRA03) Bracknell, United Kingdom RG12 1HN Telephone 44 (0) 879 013 0790
	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 Poison Information Center 0207771 5307

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

1-(2-hydroxyethyl)-2-pyrrolidone, 2-pyrrolidone, Water
None.
None.
The mixture does not meet the criteria for classification.
Not available.
Not available.
Not available.
Not available.
Contains 1,2-Benzisothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one. May produce an allergic reaction.
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. None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Note
Water	75-85	7732-18-5 231-791-2	-	-	
Classification: -					
1-(2-hydroxyethyl)-2-pyrrolidone	< 10	3445-11-2 222-359-4	01-2119977089-21-XXXX	-	
Classification: -					
2-pyrrolidone	< 7.5	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
Classification: Eye Irrit. 2;	H319				
2,4,7,9-Tetramethyl-5-decyne-4,7-dic	<1	126-86-3 204-809-1	-	-	
Classification: Skin Sens.	B·H317 Ev	e Dam. 1:H318. Eve	e Irrit. 2;H319, Aquatic Chronic 3	3;H412	

SECTION 4: First aid measures

General information	Wash affected areas thoroughly with mild soap and water.		
4.1. Description of first aid me	asures		
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.		
4.2. Most important symptoms and effects, both acute and delayed	Not available.		
4.3. Indication of any immediate medical attention and special treatment needed	Not available.		

SECTION 5: Firefighting measures

General fire hazards	Not available.
5.1. Extinguishing media Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	None known.
5.2. Special hazards arising from the substance or mixture	Not available.
5.3. Advice for firefighters Special protective equipment for firefighters	Not available.
Special fire fighting procedures	Not available.
Specific methods	None established.

SECTION 6: Accidental release measures

6.1. Personal precautions, pro	tective equipment and emergency procedures		
For non-emergency personnel	Wear appropriate personal protective equipment.		
For emergency responders	Not available.		
6.2. Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.		
6.3. Methods and material 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.		
6.4. Reference to other sections	Not available.		
SECTION 7: Handling and	d storage		
7.1. Precautions for safe handling	Avoid contact with skin, eyes and clothing.		

7.2. Conditions for safe Keep out of the reach of children. Keep away from excessive heat or cold. **storage, including any incompatibilities**

Not available.

7.3. Specific end use(s)

SECTION 8: Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring	Not available.
procedures	

Derived no-effect level (DNEL)

Components	Туре	Route	Value	Form
2,4,7,9-Tetramethyl-5-decyne-4,7-diol (CAS 126-86-3)	Consumers	Dermal	0.75 mg/kg	Systemic short term
		Dermal	0.25 mg/kg	Systemic long term
		Inhalation	1.29 mg/m3	Systemic short term
		Inhalation	0.43 mg/m3	Systemic long term
		Oral	0.75 mg/kg	Systemic short term
		Oral	0.25 mg/kg	Systemic long term
	Workers	Dermal	1.5 mg/kg	Systemic short term
		Dermal	0.5 mg/kg	Systemic long term
		Inhalation	5.28 mg/m3	Systemic short term
		Oral	1.76 mg/m3	Systemic long term
2-pyrrolidone (CAS 616-45-5)	Consumers	Dermal	6 mg/kg bw/d	Systemic long term
		Dermal	167 mg/kg bw/d	Systemic acute short ter
		Inhalation	17.1 mg/m3	Systemic long term
		Oral	5.2 mg/kg bw/d	Systemic long term
		Oral	33.3 mg/kg bw/d	Systemic acute short terr
	Workers	Dermal	277 mg/kg bw/d	Systemic acute short terr
		Dermal	10 mg/kg bw/d	Systemic long term
		Inhalation	57.8 mg/m3	Systemic long term
edicted no effect concentrations (PNECs)				
Components	Туре	Route	Value	Form
2,4,7,9-Tetramethyl-5-decyne-4,7-diol (CAS 126-86-3)	Not applicable	Freshwater	0.04 mg/l	
		Intermittant	0.4 mg/l	Releases
		Marine water	0.004 mg/l	
		Sediment	0.32 mg/kg	Freshwater
		Sediment	0.032 mg/kg	Marine water
		Soil	0.028 mg/kg	
		STP	7 mg/l	Sewage Treatment Plant
2-pyrrolidone (CAS 616-45-5)	Not applicable	Freshwater	0.5 mg/l	

Components	Туре	Route	Value	Form
		Intermittant	0.5 mg/l	Releases
		Marine water	0.05 mg/l	
		Sediment	0.4205 mg/kg	Freshwater
		Soil	0.0612 mg/kg	
		STP	10 mg/l	Sewage Treatment Plant
Exposure guidelines	Exposure limits have not been esta	blished for this	product.	
8.2. Exposure controls				
Appropriate engineering controls	Use in a well ventilated area.			
Individual protection measur	es, such as personal protective ed	quipment		
General information	Use personal protective equipment	to minimize exp	osure to skin and e	ye.
Eye/face protection	Not available.			
Skin protection				
- Hand protection	Not available.			
- Other	Not available.			
Respiratory protection	Not available.			
Thermal hazards	Not available.			
Hygiene measures	Handle in accordance with good in	dustrial hygiene	and safety practice.	
Environmental exposure controls	Not available.			

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Cyan
Odor	Not available.
Odor threshold	Not available.
рН	8.5 - 9.5
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 212.0 °F (> 100.0 °C) Pensky-Martens Closed Cup US EPA Method 1020
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or ex	xplosive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	3.2 - 3.3 cP
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	
VOC (Weight %)	< 291 g/L

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Not available.
10.5. Incompatible materials	Incompatible with strong bases and oxidizing agents.
10.6. Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
CECTION 11. Taxiaalaria	

SECTION 11: Toxicological information

SECTION II: TOXICOlOgic		
General information	Not available.	
11.1. Information on toxicolog	ical effects	
Acute toxicity	Based on available data, the classification criteria are	e not met.
Skin corrosion/irritation	Based on available data, the classification criteria are	e not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are	e not met.
Respiratory sensitization	Based on available data, the classification criteria are	e not met.
Skin sensitization	Based on available data, the classification criteria are	e not met.
Germ cell mutagenicity	Based on available data, the classification criteria are	e not met.
Carcinogenicity	Based on available data, the classification criteria are	e not met.
Reproductive toxicity	Based on available data, the classification criteria are	e not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are	e 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.	
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Mixture versus substance information	Not available.	
Other information	Complete toxicity data are not available for this specific formulation Refer to Section 2 for potential health effects and Section 4 for first aid measures.	

SECTION 12: Ecological information

12.1. Toxicity	This produc	t is highly soluble in water.	
Components		Species	Test Results
2-pyrrolidone (CAS 616-45-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
12.2. Persistence and degradability	Not availab	le.	
12.3. Bioaccumulative potential	Not availab	le.	
Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone		-0.85	
Bioconcentration factor (BCF)	Not availab		
12.4. Mobility in soil	Not availab		
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Not available.
Contaminated packaging	Not available.
EU waste code	Not available.
Disposal methods/information	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

TH'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.

SECTION 14: Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

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IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Further information

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA Not listed.

Authorizations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorization

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on mutagens at work	the protection of workers from the risks related to exposure to carcinogens and
Not regulated. Directive 92/85/EEC: on t are breastfeeding	he safety and health of pregnant workers and workers who have recently given birth or
Not regulated.	
Other EU regulations	
Directive 96/82/EC (Seve	so II) on the control of major-accident hazards involving dangerous substances
Not regulated.	
Directive 98/24/EC on the agents at work	protection of the health and safety of workers from the risks related to chemical
Not regulated.	
	e protection of young people at work
Not regulated.	
Other 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.
Other information	This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
	Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further rectifications and amendments).
National regulations	Not available.
15.2. Chemical safety assessment	See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

References Information on evaluation method leading to the classification of mixture	Not available. Not available.
Issue date	01-Apr-2015
Revision information	None.
Training information	Not available.
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.
Manufacturer information	HP Inc. 1501 Page Mill Road Palo Alto, CA 94304-1112 US Direct 1-650-857-5020

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
List of abbreviations	Not available.

Safe Use of Mixture Information (SUMI)

Water Based Ink: WB01 *English*

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product SDS, the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.

The REACH registration number(s), where applicable, completes an extended product SDS.

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Operational conditions	
Maximum duration	Up to 8 hours per day
Frequency of exposure	< 240 days per year
Process conditions	Covers use at ambient temperatures. Adequate ventilation should be provide for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides guidelines to ensure acceptable air quality in the workspace. Avoid direct contact. Regular cleaning of equipment and work area. Supervision in place to check that Risk Management Measures are in place are being correctly used and Operational Conditions
	followed.
Risk management measures	
Conditions and measures	Wear safety glasses with side shields (or goggles), if splashing is possible.
related to Personal Protection	
	Wear appropriate chemical resistent gloves: see section 8 of the SDS.
Equipment, hygiene and	Wear appropriate chemical resistent clothing.
health evaluation	In case of inadequate ventilation wear respiratory protection.
	Eye wash fountain and emergency showers are recommended.
	Avoid breathing mist/vapours.
	Avoid contact with skin, eyes and clothing.
	Training of workers in relation to proper use and maintenance of all Personal protection equipment (PPE) must be ensured.
Good practice advice	
Use personal protective equipme	ent as required.
Wash hands before breaks and a	after work.
Keep good industrial hygiene and	d safety practice.
Use only with adequate ventilati	
Do no eat, drink or smoke when	
Wash contaminated clothing be	
Store at room temperature.	
Environmental measures	
	in intercourse/unitercourselies
Do not allow this material to dra	
-	ding to Local, State, Federal and Provincial Environmental Regulations.
	ith appropriately licenced waste contractor.
Use descriptors	
IS-Use at industrial sites	
PW-Widespread use by profession	
SU7-Printing and reproduction n	nedia
PC18-Inks and Toners	
PROC1-Chemical production or r	refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2-Chemical production or r	refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
condition PROC8a-Transfer of substance o	tion in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment r mixture (charging and discharging) at non-dedicated facilities r mixture (charging and discharging) at dedicated facilities
ERC5-Use at industrial site leading	
	io inclusion into/onto article (indoor)
Additional information on prod	
	s on the label, the classification of the mixture is provided.
Most of the water based inks are	
	is based on the individuel ingredients and their concentration within the mixture.
	ne classification are stated in Section 3 of the SDS.
	nts on which the exposure assessment is based, are listed in section 8 of the SDS.
	zing ingredients that may cause allergic reaction to certain people.
Section 2 of the SDS states these	
1	WB01 English.pdi