C9383Series[C][2]-SDS\_UK-English-55.pdf

C9383Series[M][2]-SDS\_UK-English-55.pdf



# SAFETY DATA SHEET

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

	-
1.1. Product identifier	
Trade name or	C9383Series[C][2]
designation of the mixture	
Registration number	-
Synonyms	None.
Issue date	11-Apr-2015
Version number	04
Revision date	14-Jul-2016
Supersedes date	15-Oct-2015
1.2. Relevant identified uses o	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

Contains:	1-(2-hydroxyethyl)-2-pyrrolidone, 2-pyrrolidone, Cyan dye, Water
Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.
Precautionary statements	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Supplemental label information	Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.
2.3. Other hazards	Potential routes of overexposure to this product are skin and eye contact Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Complete toxicity data are not available for this specific formulation

## **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

## **General information**

Chemical name		%	CAS-No. / EC No.	<b>REACH Registration No.</b>	Index No.	Note
Water		70-80	7732-18-5 231-791-2	-	-	
Classification:	-					
1-(2-hydroxyethyl)-2-pyr	rolidone	<10	3445-11-2 222-359-4	01-2119977089-21-XXXX	-	
Classification:	-					
2-pyrrolidone		<5	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
Classification:	Eye Irrit. 2	;H319				
Cyan dye		<5	Proprietary	01-0000017445-69-XXXX	-	
Classification:	Eye Dam.	1;H318	-			
position comments	ments This ink supply contains an aqueous ink formulation.					

# **SECTION 4: First aid measures**

General information	Not available.			
4.1. Description of first aid me	easures			
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.			
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	CO2, water, dry chemical, or 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, prot	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.			
<b>7.2. Conditions for safe</b> Keep out of the reach of children. Keep away from excessive heat or cold.				

incompatibilities 7.3. Specific end use(s) Not available.

storage, including any

## SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
Occupational exposure limits	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Not available.
Derived no offect level (DNEL)	

# Derived no-effect level (DNEL)

Components	Туре	Route	Value	Form
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 term
		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 term
	Workers	Dermal	277 mg/kg bw/d	Systemic acute short term
		Dermal	10 mg/kg bw/d	Systemic long term
		Inhalation	57.8 mg/m3	Systemic long term
Predicted no effect concentrat	ions (PNECs)			
Components	Туре	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Not applicable	Freshwater	0.5 mg/l	
		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 es	tablished for this	product.	
8.2. Exposure controls				
Appropriate engineering controls	Use in a well ventilated area.			
Individual protection measures	s, such as personal protective	equipment		
General information	Use personal protective equipme	nt to minimize exp	posure to skin and e	ye.
Eye/face protection	Not available.			
Skin protection				
- Hand protection	Not available.			
- Other	Not available.			
<b>Respiratory protection</b>	Not available.			
Thermal hazards	Not available.			
Hygiene measures	Handle in accordance with good	industrial hygiene	and safety practice.	

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Not available.
Color	Cyan
Odor	Not available.
Odor threshold	Not available.
рН	7.1 - 7.7
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	> 200.0 °F (> 93.3 °C) Setaflash Closed Tester
Evaporation rate	Not determined
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.
Vapor pressure	Not determined
Solubility(ies)	
Solubility (water)	Soluble in water
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	2 cp
Explosive properties	Not available.
Oxidizing properties	Not determined
9.2. Other information	
VOC (Weight %)	< 242 g/L
SECTION 10: Stability an	d reactivity

#### **SECTION 10: Stability and reactivity**

10.1. Reactivity 10.2. Chemical stability	Not available. 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.

# **SECTION 11: Toxicological information**

General information 11.1. Information on toxicolog	Not available. Jical effects
Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
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	Based on available data, the classification criteria are not met.			
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.			
Specific target organ toxicity - repeated exposure	Based on avai	Based on available data, the classification criteria are not met.		
Aspiration hazard	Based on avai	lable data, the classification criteria are no	t met.	
Components	Species	т	est Results	
2-pyrrolidone (CAS 616-45-5)				
Acute				
Oral				
LD50	Guinea pig	6	500 mg/kg	
	Rat	6	500 mg/kg	
Mixture versus substance information	Not available.			
Other information		city data are not available for this specific on 2 for potential health effects and Sectio		
SECTION 12: Ecological	information			
Aquatic toxicity	Not expected	to be harmful to aquatic organisms.		
12.1. Toxicity				
Product		Species	Test Results	
C9383Series[C][2]				
Aquatic				
Acute				
Fish	LC50	Fathead minnow (Pimephales promelas)	> 750 mg/l, 96 hours	
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 available.			
12.3. Bioaccumulative potential	Not available.			
Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone		-0.85		
<b>Bioconcentration factor (BCF)</b>	Not available.			
12.4. Mobility in soil	Not available.			
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.			
12.6. Other adverse effects	Not available.	Not available.		
SECTION 13: Disposal co	nsideration	IS IN THE REPORT OF THE REPORT		

# **SECTION 13: Disposal considerations**

13.1. Waste treatment meth	ods
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 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.

#### IATA

Not regulated as dangerous goods.

#### IMDG No

Not regulated as dangerous goods.

## ADR

Not regulated as dangerous goods.

## Further information

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

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 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

## **Other EU regulations**

#### Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances 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 info	rmation			
References	Not available.			
Information on evaluation method leading to the classification of mixture	Not available.			
Issue date	11-Apr-2015			
<b>Revision information</b>	None.			
Training information	Not available.			
Disclaimer	This Safety Data Sheet document is provided without charge to customers of HP. Data is the most			

DiscialineThis safety bata sheet document is provided without thange to customers of HP. Data is the most<br/>current known to HP at the time of preparation of this document and is believed to be accurate. It<br/>should not be construed as guaranteeing specific properties of the products as described or<br/>suitability for a particular application. This document was prepared to the requirements of the<br/>jurisdiction specified in Section 1 above and may not meet regulatory requirements in other<br/>countries.Manufacturer informationHP Inc.<br/>1501 Page Mill Road<br/>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.

, , , , , , , , , , , , , , , , , , ,	3, where upplicable, completes an extended product 3D3.		
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	onal workers		
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 to inclusion into/onto article			
ERCS-Use at industrial site leading to inclusion into/onto article ERC8c-Widespread use leading to 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.		
All ingredients contributing to the 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			
I	WB01 English.pdf		



# SAFETY DATA SHEET

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

	-
1.1. Product identifier	
Trade name or	C9383Series[M][2]
designation of the mixture	
Registration number	-
Synonyms	None.
Issue date	11-Apr-2015
Version number	03
Revision date	15-Jul-2016
Supersedes date	15-Oct-2015
1.2. Relevant identified uses o	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

Contains:	1-(2-hydroxyethyl)-2-pyrrolidone, 2-pyrrolidone, Water
Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.
Precautionary statements	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Supplemental label information	Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.
2.3. Other hazards	Potential routes of overexposure to this product are skin and eye contact Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Complete toxicity data are not available for this specific formulation None of the ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or ACGIH.

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

## **General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water	70-85	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				

**Composition comments** 

This ink supply contains an aqueous ink formulation.

## **SECTION 4: First aid measures**

General information Not available.

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. 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.
4.2. Most important symptoms and effects, both acute and delayed	Not available.
4.3. Indication of any immediate medical attention and special treatment	Not available.

needed

## **SECTION 5: Firefighting measures**

General fire hazards	Not available.		
5.1. Extinguishing media Suitable extinguishing media	CO2, water, dry chemical, or foam		
Unsuitable extinguishing media	None known.		
5.2. Special hazards arising from the substance or mixture	Refer to section 10.		
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, protective 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		Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand			
containment and cleaning up 6.4. Reference to other sections	or diatomaceous earth, commercial sorbents, or recover using pumps. Not available.				
SECTION 7: Handling and	-	t with alking away an	d alathing		
7.1. Precautions for safe handling		t with skin, eyes and	-		
7.2. Conditions for safe storage, including any incompatibilities	Keep out of	the reach of childrer	n. Keep away from	excessive heat or c	old.
7.3. Specific end use(s)	Not available	2.			
SECTION 8: Exposure cor	ntrols/pers	sonal protection	on		
8.1. Control parameters					
Occupational exposure limits	No exposure	limits noted for ing	redient(s).		
Biological limit values	No biological	exposure limits not	ed for the ingredie	ent(s).	
Recommended monitoring procedures	Not available	2.			
Derived no-effect level (DNEL)					
Components		Туре	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)		Consumers Workers	Dermal Dermal Inhalation Oral Oral Dermal Dermal	6 mg/kg bw/d 167 mg/kg bw/d 17.1 mg/m3 5.2 mg/kg bw/d 33.3 mg/kg bw/d 277 mg/kg bw/d 10 mg/kg bw/d	Systemic long term Systemic acute short terr Systemic long term Systemic long term Systemic acute short terr Systemic acute short terr Systemic long term
Predicted no effect concentrati	ions (PNECs)	)	Inhalation	57.8 mg/m3	Systemic long term
Components		Туре	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)		Not applicable	Freshwater Intermittant Marine water Sediment Soil STP	0.5 mg/l 0.5 mg/l 0.05 mg/l 0.4205 mg/kg 0.0612 mg/kg 10 mg/l	Releases Freshwater Sewage Treatment Plant
Exposuro quidolinos	Expocure lim	its have not been o		5.	Sewage meatment hant
Exposure guidelines 8.2. Exposure controls		its have not been e		product.	
Appropriate engineering	Use in a well	ventilated area.			
controls Individual protection measures	s such as no	rsonal protective	equinment		
General information		=		oosure to skin and e	
Eye/face protection	Not available				yc.
Skin protection	NUL AVAIIADIE				
- Hand protection	Not available				
- Other	Not available				
Respiratory protection	Not available				
Thermal hazards	Not available				
	Not available. Handle in accordance with good industrial hygiene and safety practice.				
Hygiene measures	Handle in ac			and surcey placeter	

**9.1. Information on basic physical and chemical properties Appearance** 

Physical state	Not available.
Color	Magenta
Odor	Not available.
Odor threshold	Not available.
рН	7 - 7.6
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	> 200.0 °F (> 93.3 °C) Setaflash Closed Tester
Evaporation rate	Not determined
Flammability (solid, gas)	Not available.
Upper/lower flammability or early a second sec	xplosive limits
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.
Vapor pressure	Not determined
Solubility(ies)	
Solubility (water)	Soluble in water
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	2 cp
Explosive properties	Not available.
Oxidizing properties	Not determined
9.2. Other information	
Specific gravity	1 - 1.2
VOC (Weight %)	191 g/L EPA Method 24

# SECTION 10: Stability and reactivity

10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions	Not available. Stable under recommended storage conditions. 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.

# SECTION 11: Toxicological information

#### General information

## 11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
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	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.

Not available.

Specific target organ toxicity       Based on available data, the classification criteria are not met.         Aspiration hazard       Based on available data, the classification criteria are not met.         Components       Species         2-pyrrolidone (CAS 616-45-5)       Katue         Acute       Ora/         D50       Guinea plg       6500 mg/kg         Rat       6500 mg/kg         Not available.       Not available.         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       Not expected to be harmful to aquatic organisms.         12.1. Toxicity       Not expected to be harmful to aquatic organisms.         12.1. Toxicity       Not expected to be harmful to aquatic organisms.         2.2. Product       Species       Test Results         Components       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Acute         Aquatic       Cute       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Variable.       Variable.         2-pyrrolidone (CAS 616-45-5)       Not available.       Variable.       Variable.         2-pyrrolidone (CA				
Components         Species         Test Results           2-pyrrolidone (CAS 616-45-5) Acute Oral         6500 mg/kg           Dat         6500 mg/kg           ID50         Guinea pig         6500 mg/kg           Nixture versus substance information         Not available.         6500 mg/kg           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         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.           4quatic toxicity         Not expected to be harmful to aquatic organisms.           12.1. Toxicity         Product         Species         Test Results           9333Series[M][2]         Aquatic         Acute         Fish         LC50         Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours           Components         Species         Test Results         2-pyrrolidone (CAS 616-45-5)         Aquatic           Aquatic         Crustacea         EC50         Water flea (Daphnia pulex)         13.21 mg/l, 48 hours           12.2. Persistence and degradability         Not available.         -0.85         5           12.3. Bioaccumulative nof tox wailable.         -0.85         5<	Specific target organ toxicity - repeated exposure	Based on avail	lable data, the classification criteria are no	it met.
2-pyrrolidone (CAS 616-45-5) Acute <i>Oral</i> LD50 Guinea pig 6500 mg/kg Rat 6500 mg/kg Mixture versus substance 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 Aquatic toxicity Not expected to be harmful to aquatic organisms. 12.1. Toxicity Product Species Test Results C9383Series[M][2] Aquatic Acute Fish LC50 Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours Components Species Test Results 2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea EC50 Water flea (Daphnia pulex) 13.21 mg/l, 48 hours 12.3. Bioaccumulative Not available. degradability 13.2.1 mg/l, 48 hours 12.3. Bioaccumulative Not available. potential Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone 2.4. Mobility in soil Not available. 12.4. Mobility in soil Not available. 12.5. Other adverse effects Not available.	Aspiration hazard	Based on available data, the classification criteria are not met.		
Acute       Oral         D50       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       Not expected to be harmful to aquatic organisms.         12.1. Toxicity       Not expected to be harmful to aquatic organisms.         Product       Species       Test Results         Components       Species       Test Results         Aquatic       Acute       Fish       LC50         Aquatic       Species       Test Results         Components       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Test Results         Aquatic       Not available.       Not available.         Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       -0.85         Portition coefficient       -0.85       -         Portition coefficient       Not available.       -         Portition coefficient       Not available.       -	Components	Species	Species Test Results	
Oral LD50     Guinea pig Rat     6500 mg/kg       Mixture versus substance information     Not available.     6500 mg/kg       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     Refer to Section 2 for potential health effects and Section 4 for first aid measures.       SECTION 12: Ecological information     Not expected to be harmful to aquatic organisms.       2.1. Toxicity     Not expected to be harmful to aquatic organisms.       Product     Species     Test Results       C0333Series[M][2]     Aquatic Acute Fish     LC50     Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours       Components     Species     Test Results       2-pyrrolidome (CAS 616-45-5) Aquatic Crustacea     EC50     Water flea (Daphnia pulex)     13.21 mg/l, 48 hours       12.2. Persistence and egeradability     Not available.     - -0.85     - - - - - - - - - - - - - - - - - - -	2-pyrrolidone (CAS 616-45-5)			
LD50     Guinea pig Rat     6500 mg/kg       Mixture versus substance information     Not available.     6500 mg/kg       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 iformation     Not expected to be harmful to aquatic organisms.       12.1. Toxicity     Not expected to be harmful to aquatic organisms.       Product     Species     Test Results       Guata Accute Fish     LC50     Fathead minnow (Pimephales promels)     > 750 mg/l, 96 hours       Components     Species     Test Results       2-pyrrolidone (CAS 616-45-5)     Aquatic Accute     Not available.       Crustacea     EC50     Water flea (Daphnia pulex)     13.21 mg/l, 48 hours       12.2. Persistence and degradability     Not available.     -0.85       Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone     -0.85     Section 2       12.4. Mobility in soil     Not available.     -0.85       Bisoconcentration factor (BCF)     Not available.     -       12.5. Results of PBT and vPAB     Not available.     -       12.6. Other adverse effects     Not available.     -	Acute			
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     Aquatic organisms.       Aquatic toxicity     Not expected to be harmful to aquatic organisms.       12.1. Toxicity     Product     Species       Product     Species     Test Results       C3933Series[M][2]     Aquatic Acure Fish     LC50       Fish     LC50     Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours       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 available.     Not available.       12.3. Bioaccumulative potential     Not available.     -0.85       Bioconcentration factor (BCF)     Not available.     -0.85       Bioconcentration factor (BCF)     Not available.     -0.85       12.4. Mobility in soil     Not available.     -0.85       Bioconcentration factor (BCF)     Not available.     -0.85       12.5. Other adverse effects     Not available.     -0.85	Oral			
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         Aquatic toxicity       Not expected to be harmful to aquatic organisms.         21.1 Toxicity       Product       Species       Test Results         Product       Species       Test Results         C3933Series[M][2]       Aquatic Acute Fish       LC50       Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours         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 available.       Ont available.       Variable.       Variable.         12.3. Bioaccumulative potential       Not available.       -0.85       Section 1 more versistence or mixture.       -0.85         Bioconcentration factor (BCF)       Not available.       -0.85       -0.85       -0.85         Bioconcentration factor (BCF)       Not available.       -0.85       -0.85       -0.85         Bioconcentration factor (BCF)       Not available.       -0.85       -0.85       -0.85 <th>LD50</th> <th>Guinea pig</th> <th>6</th> <th>500 mg/kg</th>	LD50	Guinea pig	6	500 mg/kg
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         Aquatic toxicity       Not expected to be harmful to aquatic organisms.         12.1. Toxicity       Product         Species       Test Results         C3933Series[M][2]       Aquatic         Acute       Fish         Fish       LC50         Fish       LC50         Aquatic       Species         Aquatic       Crustacea         Crustacea       EC50         Aquatic       Crustacea         Crustacea       EC50         Vature fiea (Daphnia pulex)       13.21 mg/l, 48 hours         12.3. Bioaccumulative       Not available.         obsconcentration factor (BCF)       Not available.         12.4. Mobility in soil       Not available.         12.5. Results of PBT       Not a PBT or vPvB substance or mixture.         and vPvB       assessment         12.6. Other adverse effects       Not available.		Rat	6	500 mg/kg
Refer to Section 2 for potential health effects and Section 4 for first aid measures.         SECTION 12: Ecological information         Aquatic toxicity       Not expected to be harmful to aquatic organisms.         12.1. Toxicity       Product       Species       Test Results         C9383Series[M][2]       Aquatic       Acute       Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Components       Species       Test Results       2-pyrrolidone (CAS 616-45-5)       Aquatic         Aquatic       Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       Vot available.       Partition coefficient n-octanol/water (log Kow)       -0.85         2-pyrrolidone       -0.85       One available.       -0.85       Image: Seese Seese Seese Seese Seese Seese Seeseseses		Not available.		
Aquatic toxicity       Not expected to be harmful to aquatic organisms.         12.1. Toxicity         Product       Species       Test Results         C9383Series[M][2]       Aquatic       Acute       Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Compoents       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Species       Test Results         Aquatic Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.	Other information			
Aquatic toxicity       Not expected to be harmful to aquatic organisms.         12.1. Toxicity         Product       Species       Test Results         C9383Series[M][2]       Aquatic       Acute       Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Compoents       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Species       Test Results         Aquatic Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.	SECTION 12: Ecological	information		
Product       Species       Test Results         C9383Series[M][2]       Aquatic       Aquatic       Acute       Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Components       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Test Results         2-pyrrolidone (CAS 616-45-5)       Mater flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       Intervention         12.3. Bioaccumulative potential       Not available.       Intervention         Partition coefficient n-octanol/water (log Kow)       -0.85       Intervention         2-pyrrolidone       Not available.       -0.85         Bioconcentration factor (BCF)       Not available.       Intervention         12.5. Results of PBT and VPVB assessment       Not available.       Intervention         12.5. Results of PBT and VPVB assessment       Not available.       Intervention         12.5. Results of PBT and VPVB assessment       Not available.       Intervention         12.5. Results of PBT and VPVB       Not available.       Intervention         12.5. Results of PBT and VPVB       Not available.       Intervention         12.5. Results of PBT and VPVB       Not available.       I	_		to be harmful to aquatic organisms.	
C9383Series[M][2]         Aquatic         Acute         Fish       LC50         Fish       LC50         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 available.         12.3. Bioaccumulative potential       Not available.         Partition coefficient nocofficient       -0.85         Bioconcentration factor (BCF)       Not available.         12.4. Mobility in soil       Not available.         12.5. Results of PBT       Not a PBT or vPvB substance or mixture.         and vPvB       assessment         12.6. Other adverse effects       Not available.	12.1. Toxicity			
Aquatic       Acute         Acute       Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Components       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Image: Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       Image: Versistence and degradability       Not available.         12.3. Bioaccumulative potential       Not available.       Image: Versistence and edgradability       Not available.         Partition coefficient procefficient necotanol/water (log Kow)       -0.85       Image: Versistence and edgradability       Not available.         12.4. Mobility in soil       Not available.       Versistence or mixture.       Image: Versistence or mixture.         12.5. Results of PBT       Not available.       Image: Versistence or mixture.       Image: Versistence or mixture.         and vPvB       Not available.       Image: Versistence or mixture.       Image: Versistence or mixture.         12.6. Other adverse effects       Not available.       Image: Versistence or mixture.       Image: Versistence or mixture.         12.6. Other adverse effects       Not available.       Image: Versistence or mixture.       Image: Versistence or mixture.         12.6. Other adverse effects <th>Product</th> <th></th> <th>Species</th> <th>Test Results</th>	Product		Species	Test Results
Acute       Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Components       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Image: Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       Image: Crustacea       Not available.       Image: Crustacea         12.3. Bioaccumulative potential       Not available.       Image: Crustacea       Not available.       Image: Crustacea         Partition coefficient n-octanol/water (log Kow)       Not available.       Image: Crustacea       Image: Crustacea         12.4. Mobility in soil       Not available.       Image: Crustacea       Image: Crustacea       Image: Crustacea         12.5. Results of PBT       Not available.       Image: Crustacea       Image: Crustacea       Image: Crustacea         12.6. Other adverse effects       Not available.       Image: Crustacea       Image: Crustacea       Image: Crustacea         12.6. Other adverse effects       Not available.       Image: Crustacea       Image: Crustacea       Image: Crustacea         12.6. Other adverse effects       Not available.       Image: Crustacea       Image: Crustacea       Image: Crustacea         12.6. Other adverse effects       Not	C9383Series[M][2]			
Fish       LC50       Fathead minnow (Pimephales promelas)       > 750 mg/l, 96 hours         Components       Species       Test Results         2-pyrrolidone (CAS 616-45-5)       Aquatic       Image: Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       Image: Crustacea       Not available.       Image: Crustacea         12.3. Bioaccumulative potential       Not available.       Image: Crustacea       Not available.         Partition coefficient n-occtanol/water (log Kow) 2-pyrrolidone       -0.85       Image: Crustacea       Not available.         12.4. Mobility in soil       Not available.       Image: Not available.       Image: Not available.       Image: Not available.         12.5. Results of PBT and VPVB assessment       Not available.       Image: Not available.       Image: Not available.         12.6. Other adverse effects       Not available.       Image: Not available.       Image: Not available.	Aquatic			
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 available.     13.21 mg/l, 48 hours     13.21 mg/l, 48 hours       12.3. Bioaccumulative potential     Not available.     -0.85     -0.85       Bioconcentration factor (BCF)     Not available.     -0.85       Bioconcentration factor (BCF)     Not available.     -0.85       12.4. Mobility in soil     Not available.     -0.85       12.5. Results of PBT     Not available.     -0.85       12.6. Other adverse effects     Not available.     -0.85	Acute			
2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea EC50 Water flea (Daphnia pulex) 13.21 mg/l, 48 hours 12.2. Persistence and Not available. degradability 12.3. Bioaccumulative Not available. potential Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone -0.85 Bioconcentration factor (BCF) Not available. 12.4. Mobility in soil Not available. 12.5. Results of PBT Not available. 12.6. Other adverse effects Not available.	Fish	LC50	Fathead minnow (Pimephales promelas)	> 750 mg/l, 96 hours
Aquatic Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       13.21 mg/l, 48 hours         12.3. Bioaccumulative potential       Not available.       13.21 mg/l, 48 hours         Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone       Not available.       14.10 mg/l, 48 hours         Bioconcentration factor (BCF)       Not available.       14.10 mg/l, 48 hours         12.4. Mobility in soil       Not available.       14.10 mg/l, 48 hours         12.5. Results of PBT and vPvB assessment       Not a vailable.       14.10 mg/l, 48 hours         12.6. Other adverse effects       Not available.       14.10 mg/l, 48 hours	Components		Species	Test Results
Crustacea       EC50       Water flea (Daphnia pulex)       13.21 mg/l, 48 hours         12.2. Persistence and degradability       Not available.       Image: State Sta	2-pyrrolidone (CAS 616-45-5)			
12.2. Persistence and degradability       Not available.         12.3. Bioaccumulative potential       Not available.         Partition coefficient n-octanol/water (log Kow)	Aquatic			
degradability       Not available.         12.3. Bioaccumulative potential       Not available.         Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone       -0.85         2-pyrrolidone       -0.85         Bioconcentration factor (BCF)       Not available.         12.4. Mobility in soil       Not available.         12.5. Results of PBT and vPvB assessment       Not a PBT or vPvB substance or mixture.         12.6. Other adverse effects       Not available.	Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
potential         Partition coefficient n-octanol/water (log Kow) 2-pyrrolidone         2-pyrrolidone         -0.85         Bioconcentration factor (BCF)         Not available.         12.4. Mobility in soil       Not available.         12.5. Results of PBT       Not a PBT or vPvB substance or mixture.         and vPvB       assessment         12.6. Other adverse effects       Not available.		Not available.		
n-octanol/water (log Kow)       -0.85         2-pyrrolidone       -0.85         Bioconcentration factor (BCF)       Not available.         12.4. Mobility in soil       Not available.         12.5. Results of PBT       Not a PBT or vPvB substance or mixture.         and vPvB       assessment         12.6. Other adverse effects       Not available.		Not available.		
Bioconcentration factor (BCF)Not available.12.4. Mobility in soilNot available.12.5. Results of PBTNot a PBT or vPvB substance or mixture.and vPvBAnd vPvBassessmentNot available.12.6. Other adverse effectsNot available.	n-octanol/water (log Kow)		2.05	
12.4. Mobility in soilNot available.12.5. Results of PBTNot a PBT or vPvB substance or mixture.and vPvBNot a PBT or vPvB substance or mixture.12.6. Other adverse effectsNot available.		N	-0.85	
12.5. Results of PBT       Not a PBT or vPvB substance or mixture.         and vPvB       assessment         12.6. Other adverse effects       Not available.				
and vPvB assessment 12.6. Other adverse effects Not available.				
	and vPvB	Not a PBT or v	PvB substance or mixture.	
SECTION 12: Dispacel considerations	12.6. Other adverse effects	Not available.		
	SECTION 12: Disposal of	ncidoration	<u> </u>	

## 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 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.

# IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

#### ADR

Not regulated as dangerous goods.

**Further information** 

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

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 the protection of workers from the risks related to exposure to carcinogens and mutagens at work

#### Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

## **Other EU regulations**

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not regulated.

Directive 94/33/EC on the 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 info	rmation
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Issue date	11-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

 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

# 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.

Direct 1-650-857-5020

## 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.

Operational conditions	s), where applicable, completes an extended product 3D3.
	Up to 9 hours por day
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 ventilation	
Do no eat, drink or smoke when	
Wash contaminated clothing bef	
Store at room temperature.	
Environmental measures	
Do not allow this material to dra	in into cowors/water supplies
	ding to Local, State, Federal and Provincial Environmental Regulations.
-	vith appropriately licenced waste contractor.
· · ·	th appropriately incenced waste contractor.
Use descriptors	
IS-Use at industrial sites	
PW-Widespread use by profession	
SU7-Printing and reproduction m	
PC18-Inks and Toners	
	refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
r NOC2-Chemical production of r	ennery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3- Manufacture or formula condition	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
	or mixture (charging and discharging) at dedicated facilities
ERC5-Use at industrial site leadir	
	to 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	
	WB01_English.pd