C4820Series[B][2]-SDS_UK-English-47.pdf

C4820Series[CL][2]-SDS_UK-English-31.pdf



SAFETY DATA SHEET

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

1.1. Product identifier	
Trade name or	C4820Series[B][2]
designation of the mixture	
Registration number	-
Synonyms	None.
Issue date	07-Aug-2014
Version number	04
Revision date	26-Sep-2016
Supersedes date	09-Sep-2016
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

Eaber according to Regulation	
Contains:	2-pyrrolidone, Carbon black, 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	Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. 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 other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General	information
---------	-------------

General information Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water	75-85	7732-18-5 231-791-2	-	-	
Classification: -					
2-pyrrolidone	<10	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
Classification: Ey	e Irrit. 2;H319				
Carbon black	<5	1333-86-4 215-609-9	01-2119384822-32-XXXX	-	
Classification: -					
Composition comments		ontains an aqueous i			
CECTION 4. First aid as		resent only in a bou	nd form in this preparation.		
SECTION 4: First aid me					
General information 4.1. Description of first aid m	Not available.				
Inhalation		If symptoms persis	t, get medical attention.		
Skin contact			mild soap and water. If irritatio	n persists get me	edical
Eye contact			ith large amounts of clean, war removed. If irritation persists g		
Ingestion	-	arge amount does o	ccur, 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 c	hemical, 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 measur	es			
6.1 Porconal procautions pr	ataatiya aquirman	tand amorgana	nrocoduroc		

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Avoid contact with skin, eyes and clothing.
7.2. Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Keep away from excessive heat or cold.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

Not available.

Not available.

8.1. Control parameters

Occupational exposure I	imits
UK. EH40 Workplace	Exposure Limits (WELs)

Components	Туре	Value	
Carbon black (CAS 1333-86-4)	STEL	7 mg/m3	
	TWA	3.5 mg/m3	
Biological limit values	No biological exposure limits noted	for the ingredient(s).	

Biological limit values Recommended monitoring procedures

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
Carbon black (CAS 1333-86-4)	Consumers	Inhalation	1.75 mg/m3	Local long term
		Inhalation	0.06 mg/m3	Systemic long term
	Workers	Inhalation	2 mg/m3	Local long term
		Inhalation	1 mg/m3	Systemic long term
dicted no effect concentration	ons (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
Carbon black (CAS 1333-86-4)	Not applicable	Freshwater	5 mg/l	
		Marine water	5 mg/l	
oosure guidelines	Exposure limits have not been est	ablished for this	product.	
. Exposure controls				
propriate engineering Itrols	Use in a well ventilated area. Provide adequate ventilation.			
	, such as personal protective e	auipment		
General information	Use personal protective equipmen		osure to skin and e	ye.
Eye/face protection	Not available.	1		,
_, _, _, _, _, _, _, _, _, _, _, _, _, _				

- Hand protection	Recommended gloves: Nitrile 4 mil minimum thickness.
- Other	Protected gloves not required under intended use.
Respiratory protection	Not available.
Thermal hazards	Not available.
Hygiene measures	Handle in accordance with good industrial 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	Black.
Odor	Not available.
Odor threshold	Not available.
рН	7.8 - 8.8
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	> 199.4 °F (> 93.0 °C) Pensky-Martens Closed Cup
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 %)	< 20 g/l Estimated

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.

SECTION 11: Toxicological information

General information	Not available.
11.1. Information on toxicolog	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 avai	lable data, the classification criteria are no	t met.
Respiratory sensitization	Based on available data, the classification criteria are not met.		
Skin sensitization	Based on avai	lable data, the classification criteria are no	t met.
Germ cell mutagenicity	Based on avai	lable data, the classification criteria are no	t met.
Carcinogenicity	Based on avai	lable data, the classification criteria are no	t met.
	2B) and by the organizations bound within a bound form in	indicate that exposure to carbon black, pe a product matrix, specifically, rubber, ink, this preparation.	In their evaluations of carbon black, both r se, does not occur when it remains
IARC Monographs. Overal			
Carbon black (CAS 1333-		2B Possibly carcinogenic	
Reproductive toxicity		lable data, the classification criteria are no	
Specific target organ toxicity - single exposure	Based on avai	lable data, the classification criteria are no	t met.
Specific target organ toxicity - repeated exposure	Based on avai	lable data, the classification criteria are no	t 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
Carbon black (CAS 1333-86-4) Acute			
Oral			
LD50	Rat	>	8000 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		
12.1. Toxicity			
Product		Species	Test Results
C4820Series[B][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	
Bioconcentration factor (BCF)	Not available.		
12.4. Mobility in soil	Not available.		

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

cling 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

IMDG

Not regulated as dangerous goods.

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

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

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 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	e 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 (EU) 2015/830. Classification according to Regulation (EC) No 1272/2008 as amended.
	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	See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

assessment

References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Issue date	07-Aug-2014
Revision information	SECTION 8: Exposure controls/personal protection: - Hand protection 9. Physical & Chemical Properties: Multiple Properties SECTION 15: Regulatory information: Other information
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.

, , , , , , , , , , , , , , , , , , ,	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 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 designation of the mixture	C4820Series[CL][2]
Registration number	-
Synonyms	None.
Issue date	06-Aug-2014
Version number	04
Revision date	24-Aug-2016
Supersedes date	24-Aug-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

Eaber according to Regulation			
Contains:	Polyethylene glycol		
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	None.		
2.3. Other hazards	Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation.		
	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.		
	Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Vapors irritating to eyes and respiratory tract. Inhalation of mists/vapors of this product may cause dizziness, nausea, and respiratory tract congestion.		

SECTION 3: Composition/information on ingredients

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Polyethylene glycol	<100	25322-68-3 500-038-2	-	-	
Classification: -					
SECTION 4: First aid mea	asures				
General information	Not available.				
4.1. Description of first aid me	asures				
Inhalation	Move to fresh air.	If symptoms persis	t, get medical attention.		
Skin contact	Wash affected are attention.	eas thoroughly with	mild soap and water. If irritation	on persists get m	edical
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 la	arge amount does o	ccur, 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 c	hemical, 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	Do not direct a so and increase fire		or foam into hot, burning pool	s; this may resu	t in frothing

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 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 storage

7.1. Precautions for safe	Avoid contact with skin, eyes and clothing.
handling	

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters	
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Not available.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.
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 equipment to minimize exposure to skin and eye.
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 industrial 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	Not available.
Color	clear
Odor	Not available.
Odor threshold	Not available.
рН	Not Applicable
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 392 °F (> 200 °C)
Flash point	> 424.4 °F (> 218.0 °C)
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	< 0.01 mm Hg 20 degrees C
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	Not available.
Explosive properties	Not available.
Oxidizing properties	Not determined
9.2. Other information	
Specific gravity	1 - 1.2
VOC (Weight %)	2 g/l EPA Method 24

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	aldehydes

SECTION 11: Toxicological information

General information

Not available. 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.
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.
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	LC50/48h/dap	LC50/48h/daphnia =>10000 mg/L	
12.1. Toxicity			
Components		Species	Test Results
Polyethylene glycol (CAS 25322-6	8-3)		
Aquatic			
Fish	LC50	Atlantic salmon (Salmo salar)	> 1000 mg/l, 96 hours
12.2. Persistence and degradability	Not available.		
12.3. Bioaccumulative potential	Not available.		
Partition coefficient n-octanol/water (log Kow)	Not available.		
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.	

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.

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. All chemical substances in this HP product have been notified or are exempt from notification under Other regulations 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** 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 See attached SUMI or GEIS document, if applicable. assessment

SECTION 16: Other information

References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Issue date	06-Aug-2014
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.