CH646Series[C]-SDS_UK-English-14.pdf

CH646Series[M]-SDS_UK-English-08.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	CH646Series[C]
Registration number	N/A
Synonyms	None.
Issue date	None.
Version number	00
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	Hewlett-Packard, Ltd. Cain Road, Amen Corner Bracknell, Berkshire, RG12 1HN Telephone 44 (0) 879 013 0790
	Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP 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 Directive 67/548/EEC or 1999/45/EC as amended

···· · ·· · · · · · · · · · · · · · · ·	
Emergency overview	Contact with skin and eyes may result in irritation.
Hazard summary	
Physical hazards	Not classified for physical hazards.
Health hazards	Not classified as a health hazard.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Not available.
Main symptoms	Not available.
2.2. Label elements	
Label according to Directive 62	7/548/EEC or 1999/45/EC as amended
Contains:	1-(2-hydroxyethyl)-2-pyrrolidone, 2-pyrrolidone, Aliphatic diol, Substituted phthalocyanine salt # 4, Water
R-phrase(s)	Not available.
S-phrase(s)	Not available.
Authorization number	Not available.
Supplemental label information	Not applicable.
2.3. Other hazards	This cyan ink is not classified according to EU Directive 1999/45/EC. 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. REACH Registration No. Index No. Notes

Water		> 70	7732-18-5 231-791-2	-	-
Classification:	DSD:	-			
	CLP:	-			
1-(2-hydroxyethyl)-2-py	rrolidone	e < 10	3445-11-2 222-359-4	-	-
Classification:	DSD:	-			
	CLP:	-			
Aliphatic diol		< 10	Proprietary	-	-
Classification:	DSD:	-	-		
	CLP:	-			
2-pyrrolidone		< 5	616-45-5 210-483-1	-	-
Classification:	DSD:	Xi;R36			
	CLP:	Eye Irrit. 2;H319			
Substituted phthalocyan	ine salt i	# 4 < 5	Proprietary -	-	-
Classification:	DSD:	Xi;R41			
	CLP:	Eye Dam. 1;H318			
mposition comments	T 1	This product has bee 1999/45/EC, as ame		eria specified in the E	U Directives 67/548/EEC anc Section 16.
CTION 4: First aid m	easure	S			
neral information	1	Not available.			
L. Description of first a	id meas	sures			
Inhalation	1	Move to fresh air. If	symptoms persist, get	medical attention.	
Skin contact		Wash affected areas attention.	thoroughly with mild	soap and water. If irri	tation persists get medical
Eye contact					warm water (low pressure) for a sts get medical attention.
Ingestion]	If ingestion of a larg	e amount does occur,	seek medical attention	n.
2. Most important mptoms and effects, bo ute and delayed		Not available.			
 Indication of any mediate medical atten d special treatment eded 		No notes to physicia	ns.		
CTION 5: Firefighting	g meas	sures			
neral fire hazards	1	Not available.			
L. Extinguishing media Suitable extinguishin media		CO2, water, dry che	mical, or foam		

None known.

Unsuitable extinguishing

media

5.3. Advice for firefighters Special protective equipment for firefighters Special fire fighting procedures Not available.

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 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 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

•	
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 measure	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.
SECTION 9: Physical and ch	emical properties
9.1. Information on basic phys	sical and chemical properties
Appearance	
Physical state	Not available.

Not available.

Form

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	> 200.00 °F (> 93.33 °C) Setaflash Closed Tester
Evaporation rate	Not determined
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.
Vapor pressure	Not determined
Relative density	Not available.
Solubility(ies)	Soluble in water
Partition coefficient (n-octanol/water)	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 and r	operivity.
SECTION 10. Stability and h	eactivity
10.1. Reactivity	Not available.
•	
10.1. Reactivity	Not available.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous	Not available. Stable under recommended storage conditions.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions	Not available. Stable under recommended storage conditions. Will not occur.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid	Not available. Stable under recommended storage conditions. Will not occur. Not available.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological in 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. f exposure
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. f exposure Not available.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. f exposure Not available. Not available.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. f exposure Not available. Not available. Not available. Not available.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. f exposure Not available. Not available. Not available. Not available. Not available. Not available. Not available.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact Symptoms	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. f exposure Not available. Not available. Not available. Not available. Not available. Not available. Not available.
 10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact Symptoms 11.1. Information on toxicological 	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Information Not available. f exposure Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact Symptoms 11.1. Information on toxicolog Components 2-pyrrolidone (CAS 616-45-5) Acute	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Information Not available. f exposure Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact Symptoms 11.1. Information on toxicolog Components 2-pyrrolidone (CAS 616-45-5) Acute Oral	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Information Not available. fexposure Not available. Not available. Not available. Not available. Not available. Not available. jcal effects Species Test Results
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact Symptoms 11.1. Information on toxicolog Components 2-pyrrolidone (CAS 616-45-5) Acute	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. nformation Not available. fexposure Not available. Not available. Not available. Not available. Not available. Not available. Jocal effects Species Test Results
10.1. Reactivity 10.2. Chemical stability 10.3. Possibility of hazardous reactions 10.4. Conditions to avoid 10.5. Incompatible materials 10.6. Hazardous decomposition products SECTION 11: Toxicological i General information Information on likely routes of Ingestion Inhalation Skin contact Eye contact Symptoms 11.1. Information on toxicolog Components 2-pyrrolidone (CAS 616-45-5) Acute Oral	Not available. Stable under recommended storage conditions. Will not occur. Not available. Incompatible with strong bases and oxidizing agents. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Information Not available. fexposure Not available. Not available. Not available. Not available. Not available. Not available. jcal effects Species Test Results

Components	Species		Test Results
Aliphatic diol (CAS Proprietary)			
Acute			
Dermal			
LD50	Rabbit		> 10000 mg/kg
Oral	5.		
LD50	Rat		3730 mg/kg
Other	Maria		1720
LD50	Mouse		1738 mg/kg
Skin corrosion/irritation	Not available.		
Serious eye damage/eye irritation	Not available.		
Respiratory sensitization	Not available.		
Skin sensitization	Not available.		
Germ cell mutagenicity	Not available.		
Carcinogenicity	Not available.		
Reproductive toxicity	Not available.		
Specific target organ toxicity - single exposure	Not available.		
Specific target organ toxicity - repeated exposure	Not available.		
Aspiration hazard	Not available.		
Mixture versus substance information	Not available.		
Other information		ation has not been tested for toxic n 2 for potential health effects and	
SECTION 12: Ecological info	rmation		
Aquatic toxicity		ead minnows => 750 mg/L	
12.1. Toxicity		2,	
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)		0.05	
2-pyrrolidone		-0.85 -0.106	
Aliphatic diol Bioconcentration factor (BCF)	Not available	0.200	
Bioconcentration factor (BCF)			
Bioconcentration factor (BCF) 12.4. Mobility in soil	Not available.		
Bioconcentration factor (BCF) 12.4. Mobility in soil 12.5. Results of PBT and vPvB	Not available.	PvB substance or mixture.	
Bioconcentration factor (BCF) 12.4. Mobility in soil 12.5. Results of PBT and vPvB assessment	Not available.		
Bioconcentration factor (BCF) 12.4. Mobility in soil 12.5. Results of PBT and vPvB assessment 12.6. Other adverse effects	Not available. Not a PBT or vi Not available.		
Bioconcentration factor (BCF) 12.4. Mobility in soil 12.5. Results of PBT and vPvB assessment 12.6. Other adverse effects SECTION 13: Disposal consi	Not available. Not a PBT or vi Not available. derations		
Bioconcentration factor (BCF) 12.4. Mobility in soil 12.5. Results of PBT and vPvB assessment 12.6. Other adverse effects SECTION 13: Disposal consi 13.1. Waste treatment method	Not available. Not a PBT or vi Not available. derations		
Aiphatic dior Bioconcentration factor (BCF) 12.4. Mobility in soil 12.5. Results of PBT and vPvB assessment 12.6. Other adverse effects SECTION 13: Disposal consi 13.1. Waste treatment method Residual waste Contaminated packaging	Not available. Not a PBT or vi Not available. derations is		

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

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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 agents at work	e protection of the health and safety of workers from the risks related to chemical
Not regulated. Directive 94/33/EC on the	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.
National regulations	Not available.
15.2. Chemical Safety Assessment	Not available.
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). Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).

SECTION 16: Other information

References	Not available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15	R36 Irritating to eyes. R41 Risk of serious damage to eyes.
	H318 Causes serious eye damage. H319 Causes serious eye irritation.
Revision information	 Product and Company Identification: Alternate Trade Names SECTION 2: Hazards identification: 2.3. Other hazards Physical & Chemical Properties: Multiple Properties GHS: Classification
Training information	Not available.
Disclaimer	This Safety Data Sheet document is provided without charge to customers of Hewlett-Packarc Company. Data is the most current known to Hewlett-Packard Company 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	Hewlett-Packard Company 3000 Hanover Street Palo Alto, California 94304-1112 US (Direct) 1-503-494-7199 (Toll-free within the US) 1-800-457-4209

Explanation of abbreviations

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



SAFETY DATA SHEET

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

1.1. Product identifier	
Trade name or designation of the mixture	CH646Series[M]
Registration number	N/A
Synonyms	None.
Issue date	12-Jul-2013
Version number	02
Revision date	16-Jul-2013
Supersedes date	12-Jul-2013
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	Hewlett-Packard, Ltd. Cain Road, Amen Corner Bracknell, Berkshire, RG12 1HN Telephone 44 (0) 879 013 0790
	Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP 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 Directive 67/548/EEC or 1999/45/EC as amended **Emergency overview** Contact with skin and eyes may result in irritation. Hazard summary **Physical hazards** Not classified for physical hazards. **Health hazards** Not classified as a health hazard. **Environmental hazards** Not classified for hazards to the environment. Specific hazards Not available. Main symptoms Not available. 2.2. Label elements Label according to Directive 67/548/EEC or 1999/45/EC as amended Contains: 1-(2-hydroxyethyl)-2-pyrrolidone, 2-pyrrolidone, Aliphatic diol, Anthraguinone acid dye salt, Substituted xanthylium salt #1, Water R-phrase(s) Not available. S-phrase(s) Not available. Authorization number Not available. Supplemental label Not applicable. information 2.3. Other hazards This magenta ink is not classified according to EU Directive 1999/45/EC. 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.

CTION 3: Composition	on/info	rmatio	on on ing	redients			
2. Mixtures							
neral information Chemical name			%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water			> 70	7732-18-5		_	
				231-791-2			
Classification:	DSD:						
	CLP:	-					
1-(2-hydroxyethyl)-2-py	rrolidone	9	< 10	3445-11-2 222-359-4	-	-	
Classification:	DSD:	-					
	CLP:	-					
Aliphatic diol			< 10	Proprietary	-	-	
Classification:	DSD:	-					
	CLP:	-					
2-pyrrolidone			< 7.5	616-45-5 210-483-1	-	-	
Classification:	DSD:	Xi;R3	6				
	CLP:	Eye I	rrit. 2;H319	9			
Anthraquinone acid dye	salt		< 2.5	Proprietary	-	-	
Classification:	DSD:	-					
	CLP:	-					
Substituted xanthylium	salt #1		< 2.5	Proprietary	-	-	
Classification:	DSD:	-		-			
	CLP:	-					
mposition comments		This pro 1999/4	oduct has b 5/EC, as an	nended.	k formulation. criteria specified in the EU D ioned in this Section, see Sec		EEC anc
CTION 4: First aid m	neasure	S					
neral information		Not ava	ilable.				
. Description of first a	id meas	ures					
Inhalation					get medical attention.		
Skin contact		Wash a attentic		as thoroughly with m	ild soap and water. If irritati	on persists get m	edical
Eye contact					h large amounts of clean, wa emoved. If irritation persists		
Ingestion				-	cur, seek medical attention.		
2. Most important mptoms and effects, bo ute and delayed		Not ava	iilable.				
 Indication of any mediate medical atten special treatment eded 		No note	es to physic	ians.			

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, prot	ective 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 st	orage
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 contro	ols/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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Jili Information on Busic phys	
Appearance	
Physical state	Not available.
Form	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	> 200.00 °F (> 93.33 °C) Setaflash Closed Tester
Evaporation rate	Not determined
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.
Vapor pressure	Not determined
Relative density	Not available.
Solubility(ies)	Soluble in water
Partition coefficient (n-octanol/water)	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 %)	< 243 g/L

SECTION 10: Stability and reactivity

Not available.
Stable under recommended storage conditions.
Will not occur.
Not available.
Incompatible with strong bases and oxidizing agents.
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.
Information on likely rout	tes of exposure
Ingestion	Not available.
Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Symptoms	Not available.
11.1. Information on toxi	cological effects

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg
Aliphatic diol (CAS Proprietary)		
Acute		
Dermal		
LD50	Rabbit	> 10000 mg/kg
Oral		
LD50	Rat	3730 mg/kg
Other		
LD50	Mouse	1738 mg/kg
Oral		
LD50	Rat	<= 10000 mg/kg
Skin corrosion/irritation	Not available.	
Serious eye damage/eye irritation	Not available.	
Respiratory sensitization	Not available.	
Skin sensitization	Not available.	
Germ cell mutagenicity	Not available.	
Carcinogenicity	Not available.	
Reproductive toxicity	Not available.	
Specific target organ toxicity - single exposure	Not available.	
Specific target organ toxicity - repeated exposure	Not available.	
Aspiration hazard	Not available.	
Mixture versus substance information	Not available.	
Other information	This ink formulation has not been tested for the Refer to Section 2 for potential health effects	

SECTION 12: Ecological informatic

Aquatic toxicity	LC50/96h/Fath	ead minnows => 750 mg/L		
12.1. Toxicity				
Components		Species	Test Results	
2-pyrrolidone (CAS 616-45-5)				
Aquatic				
Crustacea E	C50	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 Aliphatic diol		-0.85 -0.106		
Bioconcentration factor (BCF)	Not available.			
12.4. Mobility in soil	Not available.			
12.5. Results of PBT and vPvB assessment	Not a PBT or vi	PvB substance or mixture.		
12.6. Other adverse effects	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 of HP original inkjet and LaserJet supplies.

is available in your location, please visit http://www.hp.com/recycle.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

Directive 92/85/EEC: on tl are breastfeeding	ne safety and health of pregnant workers and workers who have recently given birth or
Not regulated.	
Other EU regulations	
Directive 96/82/EC (Seve	o II) on the control of major-accident hazards involving dangerous substances
Not regulated.	
Directive 98/24/EC on the agents at work	protection of the health and safety of workers from the risks related to chemical
Not regulated.	
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.
National regulations	Not available.
15.2. Chemical Safety Assessment	Not available.
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). Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).

SECTION 16: Other information

References	Not available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15	R36 Irritating to eyes.
	H319 Causes serious eye irritation.
Revision information	None.
Training information	Not available.
Disclaimer	This Safety Data Sheet document is provided without charge to customers of Hewlett-Packarc Company. Data is the most current known to Hewlett-Packard Company 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.
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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