

SAFETY DATA SHEET

1. Identification

Product identifier	C4813Series
Other means of identification	Not available.
Recommended use	Inkjet printing
Recommended restrictions	None known.
Company identification	Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-5020
	Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-760-710-0048 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	Not available.
Precautionary statement	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	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
Supplemental information	None.

Supplemental information

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	65-75
1,5-pentanediol		111-29-5	<15
2-pyrrolidone		616-45-5	<7.5
Alkyldicarboxylic acid		Proprietary	<5
Substituted naphthalenesulfonate salt # 7		Proprietary	<2.5

	This ink supply contains an aqueous ink formulation. This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).
4. First-aid measures	

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Inhalation	Remove to fresh air. If symptoms persist, get medical attention.
Skin contact	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
Eye contact	Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.
Ingestion	If ingestion of a large amount does occur, seek medical attention.
Most important symptoms/effects, acute and delayed	Not available.

5. Fire-fighting measures

Suitable extinguishing media	For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Not available.
Specific methods	None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate personal protective equipment.
Methods and materials for containment and cleaning up Environmental precautions	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. Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
7. Handling and storage	

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Precautions for safe handling	Avoid contact with skin, eyes and clothing.
Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls/personal protection

Occupational exposure limits Biological limit values Exposure guidelines Appropriate engineering controls	No exposure limits noted for ingredient(s). No biological exposure limits noted for the ingredient(s). Exposure limits have not been established for this product. Use in a well ventilated area.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	Not available.	
Skin protection		
Hand protection	Not available.	
Other	Not available.	
Respiratory protection	Not available.	
Thermal hazards	Not available.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.	

9. Physical and chemical properties

5.1 hysical and chemical	
Appearance	
Physical state	Liquid.
Color	Yellow
Odor	Not available.
Odor threshold	Not available.
рН	3.8 - 4.2
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	> 200.0 °F (> 93.3 °C) Setaflash Closed Cup
Evaporation rate	Not determined
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not determined
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not determined
Solubility(ies)	
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	>= 2 cp
Other information	For other VOC regulatory data/information see Section 15.
VOC (Weight %)	196.45 g/l
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10. Stability and reactivity

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

11. Toxicological information

Symptoms related to the Not available. physical, chemical and toxicological characteristics

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 or skin sensitization		lable data di anti C artina attanta anno 1	t an at
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.		
Further 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.		
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
Alkyldicarboxylic acid (CAS Proprie	tary)		
Acute			
Oral			
Ulai			
LD50 12. Ecological informatio			260 mg/kg
LD50	n Static acute to	2 xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100%	
LD50 12. Ecological informatio Aquatic toxicity Ecotoxicity	n Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100%	
LD50 12. Ecological informatio Aquatic toxicity Ecotoxicity Product	n Static acute to	xicity (trout), survival (100 mg/L) = 100%	
LD50 12. Ecological informatio Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture)	n Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100%	
LD50 12. Ecological informatio Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic	n Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100%	
LD50 12. Ecological informatio Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute	Static acute to Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species	Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish	n Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas)	Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components	Static acute to Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species	Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components 2-pyrrolidone (CAS 616-45-5)	Static acute to Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas)	Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components 2-pyrrolidone (CAS 616-45-5) Aquatic	Static acute to Static acute to	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas) Species	Test Results < 400 mg/l, 96 hours Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components 2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea	Static acute to Static acute to LC50	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas)	Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components 2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea Alkyldicarboxylic acid (CAS Pro-	Static acute to Static acute to LC50	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas) Species	Test Results < 400 mg/l, 96 hours Test Results
LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components 2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea Alkyldicarboxylic acid (CAS Pro-	Static acute to Static acute to LC50 EC50 pprietary)	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas) Species Water flea (Daphnia pulex)	Test Results < 400 mg/l, 96 hours Test Results 13.21 mg/l, 48 hours
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LD50 12. Ecological information Aquatic toxicity Ecotoxicity Product C4813Series (CAS Mixture) Aquatic Acute Fish Components 2-pyrrolidone (CAS 616-45-5) Aquatic Crustacea Alkyldicarboxylic acid (CAS Pro- Aquatic Crustacea Fish Persistence and degradability Bioaccumulative potential Partition coefficient n-octa	Static acute to Static acute to Static acute to LC50 EC50 pprietary) EC50 LC50 Not available. Not available.	xicity (trout), survival (100 mg/L) = 100% xicity (trout), survival (10 mg/L) = 100% Species Fathead minnow (Pimephales promelas) Species Water flea (Daphnia pulex) Water flea (Daphnia magna) Fish	Test Results < 400 mg/l, 96 hours

13. Disposal considerations

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.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

Further information

US federal regulations

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

15. Regulatory information

US TSCA 12(b): Does not contain listed chemicals.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Hazard categories

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Other federal regulations

Safe Drinking Water Act Not regulated. (SDWA)

US state regulations

US. Massachusetts RTK - Substance List

2-pyrrolidone (CAS 616-45-5)

US. Pennsylvania Worker and Community Right-to-Know Law

China.

2-pyrrolidone (CAS 616-45-5)

US. California Proposition 65

Not Listed. Other information VOC content (less water, less exempt compounds) = 680.4 g/L (U.S. requirement, not for emissions)

Regulatory information 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

16. Other information, including date of preparation or last revision		
Issue date	08-Apr-2015	
Version #	01	
Disclaimer	This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard 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 1-650-857-5020	

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