C1823Series[C][3]-SDS\_US-English-14.pdf

C1823Series[M][3]-SDS\_US-English-13.pdf

C1823Series[Y][3]-SDS\_US-English-13.pdf



# **SAFETY DATA SHEET**

# 1. Identification

Product identifier	C1823Series[C][3]
Other means of identification	Not available.
Recommended use	Inkjet printing
<b>Recommended restrictions</b>	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) identificatio	on

#### 2. "

.,	
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.

## **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	< 10
2-pyrrolidone		616-45-5	< 10
magnesium nitrate hexahydrate		10377-60-3	<7.5
Alkyldiol ethoxylate		Proprietary	<2.5
Cyan colorant		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	

4. First-ald measures	
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	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.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
7. Handling and storage	

#### . Handling and storage

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	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
Appropriate engineering controls	Use in a well ventilated area. Provide adequate ventilation.
Individual protection measure	s, such as personal protective equipment
Eye/face protection	Not required under intended use.
Skin protection	
Hand protection	Not available.
Other	Protected gloves not required under intended use.
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
Thermal hazards	Not available.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

	P P
Appearance	
Physical state	Liquid.
Color	Cyan
Odor	Not available.
Odor threshold	Not available.
рН	7.8 - 8.6
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	>= 200.0 °F (>= 93.3 °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.
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	
Specific gravity	1 - 1.2
Other information	For other VOC regulatory data/information see Section 15.
VOC (Weight %)	< 167 g/l

# 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 physical, chemical and toxicological characteristics	Not available.
Information on toxicological e	ffects
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, th	e classification criteria are not met.
Respiratory or skin sensitization	on	
<b>Respiratory sensitization</b>	Based on available data, th	e classification criteria are not met.
Skin sensitization	Based on available data, th	e classification criteria are not met.
Germ cell mutagenicity	Based on available data, th	e classification criteria are not met.
Carcinogenicity	Based on available data, th	e classification criteria are not met.
Reproductive toxicity	Based on available data, th	e classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, th	e classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, th	e classification criteria are not met.
Aspiration hazard	Based on available data, th	e classification criteria are not met.
Further information		not available for this specific formulation ntial health effects and Section 4 for first aid measures.
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		

LD50	Guinea pig	6500 mg/kg
	Rat	6500 mg/kg

### 12. Ecological information

**Aquatic toxicity** 

The product contains a substance which may cause long-term adverse effects in the aquatic environment.

#### **Ecotoxicity**

Components		Species	Test Results
2-pyrrolidone (CAS 616-45-5	5)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Cyan colorant (CAS Proprieta	ary)		
Aquatic			
Crustacea	EC50	Daphnia	50 - 100 mg/l, 48 Hours
Persistence and degradabilit	<b>y</b> Not available.		
Bioaccumulative potential	Not available.		
Partition coefficient n-oc 2-pyrrolidone	tanol / water (l	l <b>og Kow)</b> -0.85	
Mobility in soil	Not available.		
Other adverse effects	Not available.		

#### 13. Disposal considerations

 

 Disposal instructions
 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.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

#### ADR

Not regulated as dangerous goods.

Further information Not a d

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

#### 15. Regulatory information

**US federal regulations** US TSCA 12(b): Does not contain listed chemicals. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories 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 No 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. New Jersey Worker and Community Right-to-Know Act Not listed. US. Pennsylvania Worker and Community Right-to-Know Law 2-pyrrolidone (CAS 616-45-5) **US. Rhode Island RTK** Not regulated. **US. California Proposition 65** Not Listed. **Other information** VOC content (less water, less exempt compounds) = <547.9 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids) **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 China. 16. Other information, including date of preparation or last revision

Issue date	17-Apr-2015
Version #	01

DisclaimerThis Safety Data Sheet document is provided without charge to customers of Hewlett-Packard<br/>Company. Data is the most current known to Hewlett-Packard Company at the time of preparation<br/>of this document and is believed to be accurate. It should not be construed as guaranteeing<br/>specific properties of the products as described or suitability for a particular application. This<br/>document was prepared to the requirements of the jurisdiction specified in Section 1 above and<br/>may not meet regulatory requirements in other countries.Manufacturer informationHewlett-Packard Company<br/>3000 Hanover Street<br/>Palo Alto, California 94304-1112 US<br/>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



# **SAFETY DATA SHEET**

# 1. Identification

Product identifier	C1823Series[M][3]	
Other means of identification	Not available.	
Recommended use	Inkjet printing	
<b>Recommended restrictions</b>	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) 1-208-222-2551	
	(Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com	

#### 2. Hazard(s) identification

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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	Contains Reactive Red dye. May produce an allergic reaction.

#### 3. Composition/information on ingredients

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	60-70
1,5-pentanediol		111-29-5	< 10
2-pyrrolidone		616-45-5	< 10
magnesium nitrate hexahydrate		10377-60-3	< 7.5
Substituted napthalenesulfonate salt #10		Proprietary	< 5
Alkyldiol ethoxylate		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	

4. First-ald measures	
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	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.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
7. Handling and storage	

#### . Handling and storage

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	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
Appropriate engineering controls	Use in a well ventilated area. Provide adequate ventilation.
Individual protection measure	s, such as personal protective equipment
Eye/face protection	Not required under intended use.
Skin protection	
Hand protection	Not available.
Other	Protected gloves not required under intended use.
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.
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	Magenta
Odor	Not available.
Odor threshold	Not available.
рН	7.8 - 8.6
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	>= 200.0 °F (>= 93.3 °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.
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	
Specific gravity	1 - 1.2
Other information	For other VOC regulatory data/information see Section 15.
VOC (Weight %)	< 167 g/l

# 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 physical, chemical and toxicological characteristics	Not available.	
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 avail	lable data, the classification criteria	are not met.
Respiratory or skin sensitization	on		
Respiratory sensitization	Based on avai	lable data, the classification criteria	are not met.
Skin sensitization	Based on avai	lable data, the classification criteria	are not met.
Germ cell mutagenicity	Based on avai	lable data, the classification criteria	are not met.
Carcinogenicity	Based on avai	lable data, the classification criteria	are not met.
Reproductive toxicity	Based on avai	lable data, the classification criteria	are not met.
Specific target organ toxicity - single exposure	Based on avail	lable data, the classification criteria	are not met.
Specific target organ toxicity - repeated exposure	Based on avail	lable data, the classification criteria	are not met.
Aspiration hazard	Based on avai	lable data, the classification criteria	are not met.
Further information		city data are not available for this sp on 2 for potential health effects and	
Components	Species		Test Results
2-pyrrolidone (CAS 616-45-5)			
Acute			
Oral			
LD50	Guinea pig		6500 mg/kg
	Rat		6500 mg/kg
12. Ecological informatio Aquatic toxicity Ecotoxicity		ble for this product.	
Components		Species	Test Results
2-pyrrolidone (CAS 616-45-5) Aquatic			
Crustacea			
	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Persistence and degradability		Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Persistence and degradability Bioaccumulative potential	Not available.	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Persistence and degradability Bioaccumulative potential Partition coefficient n-octa	Not available. Not available.	og Kow)	13.21 mg/l, 48 hours
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone	Not available. Not available. anol / water (l		13.21 mg/l, 48 hours
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil	Not available. Not available. <b>anol / water (l</b> a Not available.	og Kow)	13.21 mg/l, 48 hours
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone	Not available. Not available. anol / water (l	og Kow)	13.21 mg/l, 48 hours
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil	Not available. Not available. <b>anol / water (l</b> Not available. Not available.	og Kow)	13.21 mg/l, 48 hours
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil Other adverse effects	Not available. Not available. anol / water (la Not available. Not available. Do not allow t	og Kow) -0.85 his material to drain into sewers/wa	
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil Other adverse effects 13. Disposal consideration	Not available. Not available. <b>anol / water (la</b> Not available. Not available. <b>Do not allow t</b> Dispose of wat Regulations. HP's Planet Pa HP original ink	og Kow) -0.85 his material to drain into sewers/wa ste material according to Local, Stat	ter supplies. e, Federal, and Provincial Environmental g program enables simple, convenient recycling o e information and to determine if this service is
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions	Not available. Not available. <b>anol / water (l</b> Not available. Not available. <b>Do not allow t</b> Dispose of was Regulations. HP's Planet Pa HP original ink available in yo	og Kow) -0.85 his material to drain into sewers/wa ste material according to Local, Stat artners (trademark) supplies recycling cjet and LaserJet supplies. For more	ter supplies. e, Federal, and Provincial Environmental g program enables simple, convenient recycling c e information and to determine if this service is
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions	Not available. Not available. <b>anol / water (l</b> Not available. Not available. <b>Do not allow t</b> Dispose of was Regulations. HP's Planet Pa HP original ink available in yo	og Kow) -0.85 his material to drain into sewers/wa ste material according to Local, Stat artners (trademark) supplies recycling cjet and LaserJet supplies. For more	ter supplies. e, Federal, and Provincial Environmental g program enables simple, convenient recycling c e information and to determine if this service is
Bioaccumulative potential Partition coefficient n-octa 2-pyrrolidone Mobility in soil Other adverse effects 13. Disposal consideratio Disposal instructions	Not available. Not available. <b>anol / water (le</b> Not available. Not available. <b>Do not allow t</b> Dispose of was Regulations. HP's Planet Pa HP original ink available in yo	og Kow) -0.85 his material to drain into sewers/wa ste material according to Local, Stat artners (trademark) supplies recycling cjet and LaserJet supplies. For more	ter supplies. e, Federal, and Provincial Environmental g program enables simple, convenient recycling c e information and to determine if this service is

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

15. Regulatory informat	ion
US federal regulations	US TSCA 12(b): Does not contain listed chemicals.
TSCA Section 12(b) Expor	t Notification (40 CFR 707, Subpt. D)
Not regulated. CERCLA Hazardous Substa	ance List (40 CFR 302.4)
Not listed. SARA 304 Emergency rele	ase notification
Not regulated.	
-	ed Substances (29 CFR 1910.1001-1050)
Superfund Amendments and F	Reauthorization Act of 1986 (SARA)
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely haza	rdous substance
Not listed.	
SARA 311/312 Hazardous chemical	No
Other federal regulations	
Safe Drinking Water Act (SDWA)	Not regulated.
US state regulations	
US. Massachusetts RTK - S	
2-pyrrolidone (CAS 616-4 US. New Jersey Worker ar	l5-5) Id Community Right-to-Know Act
Not listed. US. Pennsylvania Worker	and Community Right-to-Know Law
2-pyrrolidone (CAS 616-4 US. Rhode Island RTK	I5-5)
Not regulated.	
<b>US. California Proposition</b> Not Listed.	
Other information	VOC content (less water, less exempt compounds) = <540.2 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)
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 China.
16. Other information, in	ncluding date of preparation or last revision
Issue date	17-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



# **SAFETY DATA SHEET**

# 1. Identification

Product identifier	C1823Series[Y][3]
Other means of identification	Not available.
Recommended use	Inkjet printing
<b>Recommended restrictions</b>	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	n

# 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	70-80
metal nitrate # 1		Proprietary	< 7.5
2-pyrrolidone		616-45-5	< 5
arylazopyrazolesulfonate salt # 1		Proprietary	< 5
Diethylene glycol		111-46-6	< 5
Alkyldiol ethoxylate		Proprietary	<2.5

Composition comments	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		

4. First-aid measures	
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	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.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
7. Handling and storage	

# 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

Components	Туре	Value	
Diethylene glycol (CAS 111-46-6)	TWA	10 mg/m3	
ological limit values	No biological exposure limits noted for	the ingredient(s).	
cposure guidelines	Exposure limits have not been establis	hed for this product.	
ppropriate engineering ontrols	Use in a well ventilated area. Provide adequate ventilation.		
dividual protection measur	es, such as personal protective equip	oment	
Eye/face protection	Not required under intended use.		
Skin protection			
Hand protection	Not available.		
Other	Protected gloves not required under in	tended use.	
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators m be required.		

#### 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Yellow
Odor	Not available.
Odor threshold	Not available.
рН	7.8 - 8.6
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not determined
Flash point	>= 200.0 °F (>= 93.3 °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.
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	
Specific gravity	1 - 1.2
Other information	For other VOC regulatory data/information see Section 15.
VOC (Weight %)	< 89 g/l
10 Stability and reactivity	n <i>i</i>

#### 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.

### 11. Toxicological information

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

#### Information on toxicological effects

Based on available data, the classification criteria are not met.         Serious see damage/see           Based on available data, the classification criteria are not met.         Based on available data, the classification criteria are not met.           Respiratory or skin sensitization         Based on available data, the classification criteria are not met.           Based on available data, the classification criteria are not met.         Based on available data, the classification criteria are not met.           Carcinogenicity         Based on available data, the classification criteria are not met.           Based on available data, the classification criteria are not met.         Based on available data, the classification criteria are not met.           Specific target organ toxic         Based on available data, the classification criteria are not met.           Specific target organ toxic         Based on available data, the classification criteria are not met.           Specific target organ toxic         Based on available data, the classification criteria are not met.           Specific target organ toxic         Based on available data, the classification criteria are not met.           Specific target organ toxic         Based on available data, the classification criteria are not met.           Specific target organ toxic         Based on available data, the classification criteria are not met.           Specific target organ toxic         Bordon available data, the classification criteria are not met.           Specific ta			
Serious or damage/eye         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.           Gardinogenicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Reporture information         Complete toxicity data are not available for this specific formulation           Retret information         Gaunea pig         Gaunea pig           Colo         Gaunea pig         Gaunea pig           Coronic         Mathe         Specon available data	Acute toxicity		
irritation Respiratory or skin sensitization Respiratory sensitization Based on available data, the classification criteria are not met. Skin sensitization Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met. Specific target organ toxicity sense are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity sense are not met. Specific target organ toxicity sense are not met. Specific target organ toxicity sense are not available data, the classification criteria are not met. Specific target organ toxicity are not met available data, the classification criteria are not met. Specific target organ toxicity are not met available data, the classification criter	-		
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Skin sensitizationBased on available data, the classification criteria are not met.Gern cell mutagenicityBased on available data, the classification criteria are not met.Reproductive toxicityBased on available data, the classification criteria are not met.Reproductive toxicityBased on available data, the classification criteria are not met.Specific target organ toxicityBased on available data, the classification criteria are not met."specific target organ toxicityBased on available data, the classification criteria are not met."repeated exposue"Based on available data, the classification criteria are not met."specific target organ toxicityBased on available data, the classification criteria are not met."repeated exposue"Based on available data, the classification criteria are not met.Specific target organ toxicityBased on available data, the classification criteria are not met."repeated exposue"Based on available data, the classification criteria are not met.Specific target organ toxicityBased on available data, the classification criteria are not met."repeated exposue"Based on available data, the classification criteria are not met.Specific target organ toxicityBased on available data, the classification criteria are not met."repeated exposue"Based on available data, the classification criteria are not met.Specific target organ toxicity are not available data, the classification criteria are not met."complete toxicity data are not available data, the classification criteria are not met."complete toxicity data are not available data, the classification criteria a		on	
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         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         Based on available data, the classification criteria are not met.           Specific target organ toxicity         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.         Complete toxicity data are not available data, the classification criteria are not met.           Lopo         Guinea pig         Sofo mg/kg           Lots         Guinea pig         Sofo mg/kg           Carl         Dog         Noake           Derand         Img/kg <td>Respiratory sensitization</td> <td>Based on available data, the clas</td> <td>ssification criteria are not met.</td>	Respiratory sensitization	Based on available data, the clas	ssification 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       Based on available data, the classification criteria are not met.         Specific target organ toxicity       Based on available data, the classification criteria are not met.         Specific target organ toxicity       Based on available data, the classification criteria are not met.         Components       Based on available data, the classification criteria are not met.         Components       Specific target organ toxicity         Acute       Complete toxicity data are not available for this specific formulation         Components       Species       Test Results         Components       Specific arget organ toxicity       Acute         Components       Species       Test Results         Components       Species       Test Results         Cond       Rat       6500 mg/kg         LDS0       Guinea pig       6500 mg/kg         Oral       Rat       20000 mg/kg         Oral       Rat       1 mg/kg         DS0       Ratbit       1 mg/kg         Oral       Insolution       1 mg/kg         Oral       Insolution       1 mg/kg<			
Reproductive toxicity     Based on available data, the classification criteria are not met.       Specific target organ toxicity     Based on available data, the classification criteria are not met.       Specific target organ toxicity     Based on available data, the classification criteria are not met.       Specific target organ toxicity     Based on available data, the classification criteria are not met.       Sepiration 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 all measures.     Refer to Section 2 for potential health effects and Section 4 for first all measures.       Components     Specific Torpotential peath effects and Section 4 for first all measures.       Permaria     Estende       LDS0     Guinea pig       Oral     Rat       DS0     Rabit       DS0     Cat       DS0     Guinea pig       DS0     Guinea pig       DS0     Guinea	Germ cell mutagenicity	Based on available data, the clas	ssification 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.           Specific target organ toxicity repeated 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.           Specific target organ toxicity repeated 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.           Specific target organ toxicity Refer to Section 2 for potential health effects and Section 4 for first aid measures.           Components         Species         Test Results           Acute         Ganica pig         G500 mg/kg           Acute         Refer to Section 2 for potential health effects and Section 2 mg/kg         Ganica pig         G000 mg/kg           Oral         Rat         2000 mg/kg         Ganica pig         G000 mg/kg           Oral         Rat         1 mg/kg         Ganica pig	Carcinogenicity	Based on available data, the clas	ssification criteria are not met.
single exposure Specific target organ toxicity Aspiration hazard Maximum Sector 2 for potential he classification criteria are not met. Complete toxicity data are not available for this specific formulation Refer to Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Refer to Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Components Sector 2 for potential health effects and Sector 4 for first all measures. Potential (CAS 616-45-5) Sector 2 for and 1 (CAS 616 - 45-5) Sector 2 for and 1 (CAS 616 - 45-5) Sector 2 for and 1 (CAS 617 + 55) Sector 2 for and 1 (CAS 617	Reproductive toxicity	Based on available data, the clas	ssification criteria are not met.
Fepeated exposure         Based on available data, the classification criteria ar not met.           Further information         Complete toxicity data are not available for this specific formula           Further information         Species         Test Results           Components         Species         Test Results           Components         Guinea pig         6500 mg/kg           Cord         Kate         6500 mg/kg           Acute         Kate         6500 mg/kg           Cord         Kate         6500 mg/kg           Cord         Kate         6500 mg/kg           Cord         Kate         6500 mg/kg           Cord         Kate         7000 mg/kg           Cord         Kate         81 mg/kg           Chronic         Kate         1 mg/kg           Chronic         Facte         1 mg/kg           Dord         Kate         1 mg/kg           Chronic         Facte         500 mg/kg           Cora/         Kate         1 mg/kg <td>Specific target organ toxicity - single exposure</td> <td>Based on available data, the clas</td> <td>ssification criteria are not met.</td>	Specific target organ toxicity - single exposure	Based on available data, the clas	ssification 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         Test Results           Components         Species         Test Results           Acute	Specific target organ toxicity - repeated exposure	Based on available data, the clas	ssification criteria are not met.
Components         Species         Test Results           Components         Species         Test Results           2-pyrrolione (CAS 616-45-5)	Aspiration hazard	Based on available data, the clas	ssification criteria are not met.
2-pyrolidone (CAS 616-45-5) Acute Dra/ LD50 Guinea pig 6500 mg/kg Rat 6500 mg/kg arylazopyrazolesulfonate salt # 1 (CAS Proprietary) Acute Dermal LD50 Rabbit 2000 mg/kg Ora/ LD50 Rat 81 mg/kg Chronic Ora/ NOAEL Rat 1 mg/kg Chronic Ora/ NOAEL Rat 1 mg/kg Dermal LD50 Rabbit 11890 mg/kg Ora/ LD50 Cat 3300 mg/kg Ora/ LD50 Cat 3300 mg/kg Ora/ LD50 Cat 3300 mg/kg Guinea pig 8700 mg/kg Guinea pig 8700 mg/kg Rabbit 26.5 gg/kg Rat 2565 mg/kg Other LD50 Mouse 9.6 g/kg Rabbit 2000 mg/kg Other	Further information		
Acute $OrdOrdDrodLD50Guinea pigRat6500 mg/kgrotarylazopyrzolesulfonate salt # 1 (CA> Proprietary)AcuteDerma/Derma/2000 mg/kgOra'RabbitOra'Image and the same and th$	Components	Species	Test Results
Ord         Guinea pig         6500 mg/kg           LD50         Rat         6500 mg/kg           anylacopyrazolesulfonate salt # 1 (US> Proprietary)            arvet         Second         Second           Acute         2000 mg/kg         Second           Derma/         Kation         2000 mg/kg           Ora/         2000 mg/kg         Second           Data         Rat         81 mg/kg           Ora/         Second         Second           Ora/         Rat         1 mg/kg           Ora/         Second         Second           NOAEL         Rat         1 mg/kg           Derma/         Img/kg         Second           LD50         Rabit         1 mg/kg           Ora/         Second         Second           Derma/         Img/kg         Second           LD50         Cat         Second           Ora/         Second         Second           Ora/         Second         Second           ID50         Cat         Second           Imge         Second         Second           Imge         Second         Second           Imge         Second </td <td>2-pyrrolidone (CAS 616-45-5)</td> <td></td> <td></td>	2-pyrrolidone (CAS 616-45-5)		
LD50Guinea pig6500 m/sgRat6500 m/sganylazopy-zolesulfonate sait # 1 / CVP6500 m/sganylazopy-zolesulfonate sait # 1 / CVP7000 m/sgDerma/Derma/2000 m/sgDerma/Rabit2000 m/sgDarma/Rabit8000 m/sgDarbaRata81 mg/sgDarbaRata81 mg/sgDarbaRata1 mg/sg <trr></trr>	Acute		
Rat     6500 mg/kg       arylazopyrazolesulfonate salt # 1 (CAS Proprietary)     6500 mg/kg       Acute     2000 mg/kg       Dermal     2000 mg/kg       Oral     2000 mg/kg       Oral     81 mg/kg       Chronic     70al       NOAEL     Rat     1 mg/kg       Dermal     1 mg/kg       Dermal     1 mg/kg       Dermal     1 mg/kg       Oral     1 mg/kg       NOAEL     Rat     1 mg/kg       Dermal     1 mg/kg       Dermal     1 mg/kg       Dermal     1 mg/kg       Dermal     1 mg/kg       Dog     000 mg/kg       Oral     300 mg/kg       Oral     3300 mg/kg       Oral     13.3 g/kg       Quinea pig     8000 mg/kg       Mouse     13.3 g/kg       Other     1       LD50     Mouse       Acute     2655 mg/kg       Dog     9.6 g/kg       Dog     9.00 mg/kg       Dog     9.6 g/kg       Dog     9.00 mg/kg	Oral		
Arylazopyrazolesulfonate salt # 1 (CAF Proprietary) Acute Dermal LD50 Rabbit 2000 mg/kg Oral Chronic Oral NOAEL Rat NOAEL Rat Dermal LD50 Rabbit 1 mg/kg Dermal LD50 Rabbit 1 mg/kg Dermal Dermal Dermal Chronic Dermal Chronic Dermal Chronic Chro	LD50	Guinea pig	6500 mg/kg
AcuteDemal		Rat	6500 mg/kg
JoseLDS0Rabbit2000 mg/kgOra/	arylazopyrazolesulfonate salt # 1 (	CAS Proprietary)	
LDS0Rabit2000 mg/kgOra/ LDS0Rat81 mg/kgDS0Rat1 mg/kgOra/ NOAELRat1 mg/kgDotal DermalRat1 mg/kgDermalI mg/kgOra/ DotalRabit1890 mg/kgOra/ DotalI mg/kgDermalI mg/kgDS0Rabit1890 mg/kgOra/ DotalI mg/kgDS0Rabit300 mg/kgDS0Mouse0.9 mg/kgDS0Mouse9.6 mg/kgDS0Mouse9.6 mg/kgDS0Mouse9.00 mg/kgD	Acute		
OralUnit of the set	Dermal		
LD50Refa81 mg/kgCH001AAAGAAANOAELRaADemotoSomatoSomatoDemotoAADomotoAADomotoAADomotoAADomotoAADomotoAADomotoAADomotoAAAD4AAAD5AAAD5AAAD6AAAD7AAAD8AAAD8AAAD8AAAD6AAAD6AAAD6AAAD7AAAD8AAAD9AAAD9<	LD50	Rabbit	2000 mg/kg
ChronicOralNOAELRatoIngkgNOAELAcuteDermalDermalOralOralDogOralIngkgDogOne paineAcuteDog <td>Oral</td> <td></td> <td></td>	Oral		
Oral NOAELRat1 mg/kgDotethylene glycol (CAS 111-46-6)AcuteDermalDermal11890 mg/kgOralOralOralDogGatoDog Cation a pig9000 mg/kgInde a pig8700 mg/kgInde a pig13.3 g/kgInde a pig26.9 g/kgInde a pig26.9 g/kgInde a pig12.65 mg/kgInde a pig12.65 mg/kgInde a pig9.6 g/kgInde a pig9.6 g/kg <td>LD50</td> <td>Rat</td> <td>81 mg/kg</td>	LD50	Rat	81 mg/kg
NOAEL Rat Ing/sequences Ration	Chronic		
Diethylene glycol (CAS 111-46-6)         Acute         Dermal         LD50       Rabbit         LD50       Rabbit         Oral         LD50       Cat         Dog       9000 mg/kg         Guinea pig       8700 mg/kg         Mouse       13.3 g/kg         Rabbit       26.9 g/kg         Rat       12565 mg/kg         D50       Mouse       9.6 g/kg         D50       Mouse       9.000 mg/kg         D50       Mouse       9.6 g/kg         Rabbit       2000 mg/kg         Rabbit       2000 mg/kg	Oral		
AcuteDermalLD50RabitOralCoralLD50CatDog900 mg/kgGuinea pig8700 mg/kgMouse13.3 g/kgRabit26.9 g/kgRat12565 mg/kgLD50MouseOther1.2565 mg/kgLD50MouseAcute9.6 g/kgAcute9.6 g/kgAcute1.000 mg/kgAcute1.000 mg/kgAcute1.000 mg/kgAcute1.000 mg/kgAcute1.000 mg/kg	NOAEL	Rat	1 mg/kg
AcuteDermalLD50RabitOralCoralLD50CatDog900 mg/kgGuinea pig8700 mg/kgMouse13.3 g/kgRabit26.9 g/kgRat12565 mg/kgLD50MouseOther1.2565 mg/kgLD50MouseAcute9.6 g/kgAcute9.6 g/kgAcute1.000 mg/kgAcute1.000 mg/kgAcute1.000 mg/kgAcute1.000 mg/kgAcute1.000 mg/kg	Diethylene glycol (CAS 111-46-6)		
LD50Rabit1890 mg/kgOra/LD50Cat3300 mg/kgDg9000 mg/kg9000 mg/kgGuinea pig8700 mg/kgMuse13.3 g/kgRabit26.9 g/kgDther-LD50MuseMuse9.6 g/kgRabit2000 mg/kgRabit2000 mg/kg			
OralSinceLD50Cat3300 mg/kgDog9000 mg/kgGuinea pig8700 mg/kgMouse13.3 g/kgRabbit26.9 g/kgRat12565 mg/kgD50MouseMouse9.6 g/kgRabbit2000 mg/kgRabbit2000 mg/kg	Dermal		
LD50       Cat       3300 mg/kg         Dog       9000 mg/kg         Guinea pig       8700 mg/kg         Mouse       13.3 g/kg         Rabit       26.9 g/kg         LD50       Mouse         Mouse       9.6 g/kg         Rabit       2000 mg/kg         Rabit       2000 mg/kg         Rabit       2000 mg/kg	LD50	Rabbit	11890 mg/kg
Dog9000 mg/kgGuinea pig8700 mg/kgMouse13.3 g/kgRabbit26.9 g/kgRat12565 mg/kgD50MouseMouse9.6 g/kgRabbit2000 mg/kgRabbit2000 mg/kg	Oral		
Guinea pig8700 mg/kgMouse13.3 g/kgRabbit26.9 g/kgRat12565 mg/kgOther12565 mg/kgLD50MouseRabbit2000 mg/kgRat7700 mg/kg	LD50	Cat	3300 mg/kg
Guinea pig8700 mg/kgMouse13.3 g/kgRabbit26.9 g/kgRat12565 mg/kgOther12565 mg/kgLD50MouseRabbit2000 mg/kgRat7700 mg/kg		Dog	9000 mg/kg
Mouse13.3 g/kgRabbit26.9 g/kgRat12565 mg/kgOtherLD50MouseRabbit2000 mg/kgRat7700 mg/kg		-	
Rabbit26.9 g/kgRat12565 mg/kgOtherLD50MouseRabbit2000 mg/kgRat7700 mg/kg			
Rat         12565 mg/kg           Other            LD50         Mouse         9.6 g/kg           Rabbit         2000 mg/kg           Rat         7700 mg/kg			
Other     Solution       LD50     Mouse     9.6 g/kg       Rabbit     2000 mg/kg       Rat     7700 mg/kg			
LD50         Mouse         9.6 g/kg           Rabbit         2000 mg/kg           Rat         7700 mg/kg		Kat	12565 mg/kg
Rabbit2000 mg/kgRat7700 mg/kg			
Rat 7700 mg/kg	LD50	Mouse	9.6 g/kg
		Rabbit	2000 mg/kg
7.7 a/ka		Rat	7700 mg/kg
			7.7 g/kg

# **12. Ecological information**Aquatic toxicityNo data available for this product.

Ecotoxicity			
Components		Species	Test Results
2-pyrrolidone (CAS 616-45	-5)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
arylazopyrazolesulfonate sa	alt # 1 (CAS Propr	ietary)	
Aquatic			
Algae	IC50	Algae	<= 100 mg/l, 72 Hours
Crustacea	EC50	Daphnia	30 mg/l, 48 Hours
Fish	LC50	Fish	1000 mg/l, 96 Hours
Diethylene glycol (CAS 111	-46-6)		
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 32000 mg/l, 96 hours
Persistence and degradabili	ty Not available		
Bioaccumulative potential	Not available		
Partition coefficient n-o	ctanol / water (	(log Kow)	
2-pyrrolidone		-0.85	
Mobility in soil	Not available		
Other adverse effects	Not available		
13. Disposal considera	tions		
Disposal instructions	Dispose of w Regulations. HP's Planet P HP original ir	this material to drain into sewers/water sup aste material according to Local, State, Fed artners (trademark) supplies recycling prog kjet and LaserJet supplies. For more infor our location, please visit http://www.hp.cor	ram enables simple, convenient recycling mation and to determine if this service is
14. Transport informat	tion		
DOT			
Not regulated as dangerou	s qoods.		
IATA	5		
Not regulated as dangerou	s goods.		
IMDG			
Not regulated as dangerou	s goods.		
ADR			
Not regulated as dangerous go	ods.		
Further information	Not a danger	ous good under DOT, IATA, ADR, IMDG, or	RID.
15. Regulatory information	ation		
		h). Doos not contain listed shamisals	
US federal regulations	-	b): Does not contain listed chemicals.	
TSCA Section 12(b) Exp Not regulated.		(40 CFR 707, Subpt. D)	
CERCLA Hazardous Sub	stance List (40 (	CFR 302.4)	
Not listed.		,	
SARA 304 Emergency re	elease notification	on	
	lated Substance	s (29 CFR 1910.1001-1050)	
Not listed.			

Superfund Amendments and R	Reauthorization Act of 1986 (SARA)
Hazard categories Immediate Hazard - No	
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely haza	
Not listed.	
SARA 311/312 Hazardous chemical	No
Other federal regulations	
Safe Drinking Water Act (SDWA)	Not regulated.
US state regulations	
US. Massachusetts RTK - S	Substance List
2-pyrrolidone (CAS 616-4 US. New Jersey Worker an	l5-5) I <b>d Community Right-to-Know Act</b>
Not listed.	
US. Pennsylvania Worker a	and Community Right-to-Know Law
2-pyrrolidone (CAS 616-4	
Diethylene glycol (CAS 11 US. Rhode Island RTK	11-46-6)
Not regulated.	
US. California Proposition Not Listed.	65
Other information	VOC content (less water, less exempt compounds) = $<371.9 \text{ g/L}$ (U.S. requirement, not for
	emissions) VOC data based on formulation (Organic compounds minus solids)
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 China.
16. Other information, ir	ncluding date of preparation or last revision
Issue date	17-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