$CH646 Series [C] [2] - SDS\_US - English - 28.pdf$ 

 $CH646 Series [M] [2] - SDS\_US - English - 19.pdf$ 

# SAFETY DATA SHEET

## 1. Identification

Product identifierCH646Series[C][2]Other means of identificationNot available.Recommended useInkjet printingRecommended restrictionsNone 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** 

PreventionNot available.ResponseNot available.StorageNot available.DisposalNot 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	70-80
1-(2-hydroxyethyl)-2-pyrrolidone		3445-11-2	<10
2-pyrrolidone		616-45-5	<5
Cyan dye		Proprietary	<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).

Material name: CH646Series[C][2] sps us

4. First-aid measures

**Inhalation** Move to fresh air. If symptoms persist, get medical attention.

Skin contact Wash affected areas thoroughly with mild soap and water. If irritation persists get medical

attention.

Eye contact Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at

least 15 minutes or until particles are removed. If irritation persists get medical attention.

Ingestion If ingestion of a large amount does occur, seek medical attention.

Most important

symptoms/effects, acute and

delayed

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

Special protective equipment and precautions for

firefighters

CO2, water, dry chemical, or foam

None known.

Not available.

Not applicable.

Not available.

**Specific methods** None established.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

**Environmental precautions** 

Wear appropriate personal protective equipment.

Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand

Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

or diatomaceous earth, commercial sorbents, or recover using pumps.

## 7. Handling and storage

**Precautions for safe handling** 

Conditions for safe storage,

including any incompatibilities Avoid contact with skin, eyes and clothing.

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 Exposure guidelines** 

No biological exposure limits noted for the ingredient(s). Exposure limits have not been established for this product.

Appropriate engineering

controls

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

**Appearance** 

Physical state Not available.

Color Cyan

Material name: CH646Series[C][2] SDS US Odor Not available. Not available. Odor threshold 7.1 - 7.7рH Melting point/freezing point Not available.

Initial boiling point and

boiling range

Not determined

Flash point > 200.0 °F (> 93.3 °C) Setaflash Closed Tester

Not determined **Evaporation rate** 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** Not available. (n-octanol/water)

**Auto-ignition temperature Decomposition temperature** 

Not available. Not available.

**Viscosity** 2 cp

Other information For other VOC regulatory data/information see Section 15.

VOC (Weight %) < 242 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. Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon

**Hazardous decomposition** products

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

Based on available data, the classification criteria are not met. **Acute toxicity** Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/eye Based on available data, the classification criteria are not met.

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. Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met.

Material name: CH646Series[C][2]

Based on available data, the classification criteria are not met. Reproductive toxicity Specific target organ toxicity Based on available data, the classification criteria are not met.

single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure

**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.

6500 mg/kg

**Species Test Results** Components

2-pyrrolidone (CAS 616-45-5)

**Acute** Oral

LD50 Guinea pig

> Rat 6500 mg/kg

## 12. Ecological information

**Aquatic toxicity** Not expected to be harmful to aquatic organisms.

**Ecotoxicity** 

**Test Results Product Species** 

CH646Series[C][2] (CAS Mixture)

Aquatic

Acute

LC50 Fish Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours

Components **Test Results Species** 

2-pyrrolidone (CAS 616-45-5)

**Aquatic** 

Crustacea EC50 Water flea (Daphnia pulex) 13.21 mg/l, 48 hours

Persistence and degradability Not available. **Bioaccumulative potential** Not available.

Partition coefficient n-octanol / water (log Kow)

2-pyrrolidone -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 dangerous good under DOT, IATA, ADR, IMDG, or RID.

Material name: CH646Series[C][2] 4/6 9216 Version #: 02 Revision date: 11-Apr-2015 Issue date: 08-Apr-2015

SDS US

## 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.

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

2-pyrrolidone (CAS 616-45-5)

**US. California Proposition 65** 

Not Listed.

**Other information** VOC content (less water, less exempt compounds) = < 965 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 date08-Apr-2015Revision date11-Apr-2015

Version # 02

**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

Material name: CH646Series[C][2] sps us

## **Explanation of abbreviations**

**ACGIH** American Conference of Governmental Industrial Hygienists

**CAS** Chemical Abstracts Service

**CERCLA** Comprehensive Environmental Response Compensation and Liability Act

**CFR** Code of Federal Regulations

**COC** Cleveland Open Cup

**DOT** Department of Transportation

**EPCRA** Emergency Planning and Community Right-to-Know Act (aka SARA)

IARC International Agency for Research on Cancer

**NIOSH** National Institute for Occupational Safety and Health

NTP National Toxicology Program

**OSHA** Occupational Safety and Health Administration

**PEL** Permissible Exposure Limit

**RCRA** Resource Conservation and Recovery Act

**REC** Recommended

**REL** Recommended Exposure Limit

**SARA** Superfund Amendments and Reauthorization Act of 1986

**STEL** Short-Term Exposure Limit

**TCLP** Toxicity Characteristics Leaching Procedure

**TLV** Threshold Limit Value

TSCA Toxic Substances Control Act
VOC Volatile Organic Compounds

Material name: CH646Series[C][2] sps us

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** CH646Series[M][2] 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** 

None. **Hazard symbol** Signal word None.

Not available. **Hazard statement** 

**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. None of the

ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP, OSHA or

ACGIH.

**Supplemental information** None.

## 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	70-85
1-(2-hydroxyethyl)-2-pyrrolidone		3445-11-2	< 10
2-pyrrolidone		616-45-5	< 7.5
Substituted xanthylium salt #1		Proprietary	< 2.5

Material name: CH646Series[M][2] SDS US 1/6 12836 Version #: 01 Issue date: 11-Apr-2015

**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

Inhalation Move to fresh air. If symptoms persist, get medical attention.

Skin contact Wash affected areas thoroughly with mild soap and water. If irritation persists get medical

attention.

Eye contact Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at

least 15 minutes or until particles are removed. If irritation persists get medical attention.

Ingestion If ingestion of a large amount does occur, seek medical attention.

Most important

Not available.

delayed

symptoms/effects, acute and

5. Fire-fighting measures

Suitable extinguishing media CO2, water, dry chemical, or foam

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

Refer to section 10.

**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** 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.

#### Individual protection measures, such as personal protective equipment

Not available. Eye/face protection

Skin protection

**Hand protection** Not available. Not available. Other **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

#### **Appearance**

Material name: CH646Series[M][2] SDS US

**Physical state** Not available. Color Magenta Odor Not available. **Odor threshold** Not available. 7 - 7.6 pН

Melting point/freezing point Not available. Initial boiling point and Not determined

boiling range

Flash point > 200.0 °F (> 93.3 °C) Setaflash Closed Tester

**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.

Not available.

**Explosive limit - lower** 

**Explosive limit - upper** 

(%)

(%)

Not available.

Not determined Vapor pressure

Solubility(ies)

Solubility (water) Soluble in water **Partition coefficient** Not available. (n-octanol/water)

**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 %) < 243 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** Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon

products 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 available data, the classification criteria are not met.

Material name: CH646Series[M][2] SDS US 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.

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 Test Results** 

2-pyrrolidone (CAS 616-45-5)

**Acute** 

Oral

LD50 Guinea pig 6500 mg/kg

> Rat 6500 mg/kg

Substituted xanthylium salt #1 (CAS Proprietary)

**Acute** 

Oral

LD50 Rat <= 10000 mg/kg

## 12. Ecological information

**Aquatic toxicity** Not expected to be harmful to aquatic organisms.

**Ecotoxicity** 

**Product** Species **Test Results** 

CH646Series[M][2] (CAS Mixture)

**Aquatic** 

Acute

LC50 Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours Fish

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** Not available. **Bioaccumulative potential** Not available.

Partition coefficient n-octanol / water (log Kow)

2-pyrrolidone -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.

SDS US 12836 Version #: 01 Issue date: 11-Apr-2015

## 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### **IATA**

Not regulated as dangerous goods.

#### **IMDG**

Not regulated as dangerous goods.

#### **ADR**

Not regulated as dangerous goods.

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

## 15. Regulatory information

#### **US federal regulations**

US TSCA 12(b): Does not contain listed chemicals. A substance in this product is the subject of a Significant New Use Rule (SNUR) at 40CFR721.10460. The Significant New Use(s) for this substance (P03-307) is that it may not be manufactured or processed as a powder and must be used in the manner prescribed in the premanufacture notification..

TSCA 12(b) Components: Once per country reporting is required. The SNUR substance is present at 1 percent or greater in the final product.

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

Not regulated.

### **CERCLA Hazardous Substance List (40 CFR 302.4)**

#### 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)

Immediate Hazard - No **Hazard categories** 

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**

## 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) = < 1011 q/L (U.S. requirement, not for

VOC data based on formulation (Organic compounds minus solids)

5/6 12836 Version #: 01 Issue date: 11-Apr-2015

#### **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** 11-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

Material name: CH646Series[M][2] SDS US