$C4820 Series [B] [2]-SDS\_US-English-26.pdf$ 

 $C4820 Series [CL] [2] - SDS\_US-English-14.pdf$ 

# SAFETY DATA SHEET

## 1. Identification

Product identifier C4820Series[B][2]
Other means of identification Not available.
Recommended use Inkjet printing
Recommended restrictions None known.

Company identification

1501 Page Mill Road Palo Alto, CA 94304-1112

**United States** 

Telephone 650-857-5020

HP 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)

Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. Potential routes of overexposure to this product are skin and eye contact. Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Complete toxicity data are not available for this specific formulation. None of the other ingredients in this preparation are classified as carcinogens

according to ACGIH, EU, IARC, MAK, NTP or OSHA.

**Supplemental information** This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	<u></u>
Water		7732-18-5	75-85
2-pyrrolidone		616-45-5	<10
Carbon black		1333-86-4	<5

Material name: C4820Series[B][2]

**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).

Carbon black is present only in a bound form in this preparation.

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.

**Eve 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

CO2, water, dry chemical, or foam

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment

and precautions for

Not available.

firefighters

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

Value

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

Components

Keep out of the reach of children. Keep away from excessive heat or cold.

# 8. Exposure controls/personal protection

#### **Occupational exposure limits**

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value
Carbon black (CAS	PEL	3.5 mg/m3
1333-86-4)		

Type

**US. ACGIH Threshold Limit Values** 

Components	Туре	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Components	Hazards Type	Value
Carbon black (CAS 1333-86-4)	TWA	0.1 mg/m3

**Biological limit values** No biological exposure limits noted for the ingredient(s).

Material name: C4820Series[B][2] SDS US **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 measures, such as personal protective equipment

**Eye/face protection** Not available.

Skin protection

Hand protection Not available.

**Other** Protected gloves not required under intended use.

**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 Liquid.
Color Black.

Odor Not available.
Odor threshold Not available.
pH 7.8 - 8.8
Melting point/freezing point Not available.
Initial boiling point and Not determined

boiling range Flash point

> 199.4 °F (> 93.0 °C) Pensky-Martens Closed Cup

Evaporation rate Not determined
Flammability (solid, gas) Not available.
Upper/lower flammability or 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 temperatureNot available.Decomposition temperatureNot available.Viscosity>= 2 cp

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

**VOC (Weight %)** < 20 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.

Material name: C4820Series[B][2]

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 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.

> Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

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.

- single exposure

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 6500 mg/kg Guinea pig Rat 6500 mg/kg Carbon black (CAS 1333-86-4) **Acute** Oral LD50 Rat > 8000 mg/kg

## 12. Ecological information

#### **Ecotoxicity**

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

C4820Series[B][2] (CAS Mixture)

**Aquatic** 

Acute

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

Material name: C4820Series[B][2] SDS US 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 soilNot available.Other adverse effectsNot 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.

## 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.

**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** 

Material name: C4820Series[B][2] sps us

Other federal regulations

Safe Drinking Water Act

(SDWA)

Not regulated.

#### **US state regulations**

#### **US. Massachusetts RTK - Substance List**

2-pyrrolidone (CAS 616-45-5) Carbon black (CAS 1333-86-4)

## **US. New Jersey Worker and Community Right-to-Know Act**

Carbon black (CAS 1333-86-4)

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

2-pyrrolidone (CAS 616-45-5) Carbon black (CAS 1333-86-4)

#### **US. Rhode Island RTK**

Not regulated.

## **US. California Proposition 65**

#### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

CARBON BLACK (AIRBORNE, UNBOUND PARTICLES Listed: February 21, 2003

OF RESPIRABLE SIZE [<= 10 MICROMETERS]) (CAS

1333-86-4)

Other information VOC content (less water, less exempt compounds) = <106 g/L (U.S. requirement, not for emissions

) VOC data based on formulation (Organic compounds minus solids)

All chemical substances in this HP product have been notified or are exempt from notification under **Regulatory information** 

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** 07-Aug-2014 **Revision date** 24-Aug-2015

Version # 04

**Disclaimer** This Safety Data Sheet document is provided without charge to customers of HP. Data is the most

> current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other

countries.

9455 Version #: 04 Revision date: 24-Aug-2015 Issue date: 07-Aug-2014

**Revision Information** 1. Product and Company Identification: Alternate Trade Names

Physical & Chemical Properties: Multiple Properties

Other information, including date of preparation or last revision: Disclaimer

**Manufacturer information** HP

1501 Page Mill Road

Palo Alto, CA 94304-1112 US Direct 1-650-857-5020

Material name: C4820Series[B][2] SDS 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: C4820Series[B][2]

# SAFETY DATA SHEET

#### 1. Identification

**Product identifier** C4820Series[CL][2]

Other means of identification Not available. Recommended use Inkjet printing **Recommended restrictions** None known.

**Company identification** 

1501 Page Mill Road Palo Alto, CA 94304-1112

**United States** 

Telephone 650-857-5020

HP 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 exposure to this product are skin and eye contact, ingestion, and inhalation.

None of the components present in this formulation at concentrations equal to or greater than

0.1% are listed by EU, MAK, IARC, NTP or OSHA.

Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Vapors irritating to eyes and respiratory tract. Inhalation of mists/vapors of this product may cause dizziness, nausea, and respiratory tract congestion.

**Supplemental information** 

This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

## 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	<b>CAS</b> number	%
Polyethylene glycol		25322-68-3	<100

**Composition comments** This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

Material name: C4820Series[CL][2]

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

Specific methods

CO2, water, dry chemical, or foam.

None known.

Not available.

Not applicable.

Not available.

Do not direct a solid stream of water or foam into hot, burning pools; this may result in frothing

and increase fire intensity.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

**cautions,** 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** 

**US. Workplace Environmental Exposure Level (WEEL) Guides** 

Components	Туре	Value	Form	
Polyethylene glycol (CAS	TWA	10 mg/m3	Particulate.	
25322-68-3)				

**Biological limit values**No biological exposure limits noted for the ingredient(s).

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
Other
Not available.
Respiratory protection
Not available.
Not available.
Not available.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Material name: C4820Series[CL][2] sps

9607 Version #: 04 Revision date: 24-Aug-2015 Issue date: 06-Aug-2014

# 9. Physical and chemical properties

**Appearance** 

**Physical state** Not available.

Color clear

Odor Not available. **Odor threshold** Not available. Not Applicable Melting point/freezing point Not available.

Initial boiling point and

boiling range

Flash point

> 392 °F (> 200 °C)

> 424.4 °F (> 218.0 °C)

**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 < 0.01 mm Hg 20 degrees C

Solubility(ies)

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

**Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Specific gravity 1 - 1.2

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

VOC (Weight %) 2 g/l EPA Method 24

#### 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** aldehydes

products

# 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.

Material name: C4820Series[CL][2] SDS US 3/6

9607 Version #: 04 Revision date: 24-Aug-2015 Issue date: 06-Aug-2014

Serious eye damage/eye

irritation

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

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.

## 12. Ecological information

**Aquatic toxicity** LC50/48h/daphnia =>10000 mg/L

**Ecotoxicity** 

Components Species Test Results

Polyethylene glycol (CAS 25322-68-3)

Aquatic

Fish LC50 Atlantic salmon (Salmo salar) > 1000 mg/l, 96 hours

Persistence and degradability Not available.

Bioaccumulative potential Not available.

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.

## 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.

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.

Material name: C4820Series[CL][2]

#### 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** 

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act** 

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

Not listed.

**US. Rhode Island RTK** 

Not regulated.

**US. California Proposition 65** 

Not Listed.

Other information VOC content (less water, less exempt compounds) = 0 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** 06-Aug-2014 **Revision date** 24-Aug-2015

Version # 04

Disclaimer This Safety Data Sheet document is provided without charge to customers of HP. Data is the most

> current known to HP at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other

countries.

9607 Version #: 04 Revision date: 24-Aug-2015 Issue date: 06-Aug-2014

**Revision Information** Other information, including date of preparation or last revision: Disclaimer

**Manufacturer information** HP

1501 Page Mill Road

Palo Alto, CA 94304-1112 US Direct 1-650-857-5020

Material name: C4820Series[CL][2] SDS 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: C4820Series[CL][2] SDS US