

C6179Series[Y][3]-MSDS_KOREA-English-19.pdf

C6179Series[M][3]-MSDS_KOREA-English-19.pdf

C6179Series[C][3]-MSDS_KOREA-English-20.pdf



MATERIAL SAFETY DATA SHEET

1. Chemical product and company identification

A. Product name C6179Series[Y][3]
B. Recommended use and Limitations on use
Recommended use Inkjet printing
Company identification HP Korea House
23-6 Yoido-dong
Youngdeungpo-gu
Seoul 150-742, Korea
Telephone (02) 2199-0114

HP Inc. health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP Inc. Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomer.inquiries@hp.com
Issue date 14-Jun-2015
Revision date 28-Jul-2016
Version # 04

2. Hazards identification

A. Hazard category/Classification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.

B. Warning label items including precautionary statement

- **Pictogram** None.
- **Signal word** None.
- **Hazard statement** None.
- **Precautionary statement**
 - Prevention** None
 - Response** None
 - Storage** None
 - Disposal** None

C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard) Not available.

Other hazards 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.

3. Composition/information on ingredients

| Chemical identity | Common and alternative names | CAS number | ID number | Content in percent (%) |
|-----------------------------------|------------------------------|-------------|-------------|------------------------|
| Water | | 7732-18-5 | KE-35400 | 70-80 |
| metal nitrate # 1 | | Proprietary | Proprietary | <7.5 |
| 2-pyrrolidone | | 616-45-5 | KE-29978 | <5 |
| arylazopyrazolesulfonate salt # 1 | | Proprietary | Proprietary | <5 |
| Diethylene glycol | | 111-46-6 | KE-27694 | <5 |
| Alkyldiol ethoxylate | | Proprietary | Proprietary | <2.5 |

Composition comments This ink supply contains an aqueous ink formulation.

4. First aid measures

- A. In case of 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.
- B. In case of skin contact** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
- C. In case of inhalation** Remove to fresh air. If symptoms persist, get medical attention.
- D. In case of swallowing** If ingestion of a large amount does occur, seek medical attention.
- E. Note to physician** Not available.
-

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None known.

B. Specific hazards arising from the chemical (example: hazardous combustion products) Not available.

C. Specific methods of fire-fighting Not available.

C. Specific methods of fire-fighting Not available.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency measures Wear appropriate personal protective equipment.

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

C. 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.

7. Handling and storage

A. Precautions for safe handling Avoid contact with skin, eyes and clothing.

B. 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

A. Exposure limit values, biological limit values, etc

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.

B. Appropriate engineering controls Use in a well ventilated area.

C. Personal protective equipment

• **Respiratory protection** Not available.

• **Eye protection** Not available.

• **Hand protection** Not available.

• **Body protection** Not available.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Recommended monitoring procedures

Additional exposure data Exposure limits have not been established for this product.

9. Physical and chemical properties

A. Appearance

Physical state Liquid.

| | |
|---|--|
| Color | Yellow |
| B. Odor | Not available. |
| C. Odor threshold | Not available. |
| D. pH | 6.2 - 6.8 |
| E. Melting point/freezing point | Not available. |
| F. Boiling point, initial boiling point, and boiling range | Not determined |
| G. Flash point | >= 200.0 °F (>= 93.3 °C) Pensky-Martens Closed Cup |
| H. Evaporation rate | Not determined |
| I. Flammability (solid, gas) | Not available. |
| J. Upper/lower limit on flammability or explosive limits | |
| Flammability limit - lower (%) | Not determined |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| K. Vapor pressure | Not determined |
| L. Solubility | |
| Solubility (water) | Soluble in water |
| M. Vapor density | >= 1 (air = 1.0) |
| N. Specific gravity | Not available. |
| O. n-octanol/water partition coefficient | Not available. |
| P. Auto-ignition temperature | Not available. |
| Q. Decomposition temperature | Not available. |
| R. Viscosity | >= 2 cp |
| S. Molecular weight | Not available. |
| Other data | |
| Oxidizing properties | Not determined |
| VOC (Weight %) | < 89.6 g/l |

10. Stability and reactivity

A. Stability and hazardous reaction potential

| | |
|-------------------------------------|--|
| Stability | Stable under recommended storage conditions. |
| Hazardous reaction potential | Will not occur. |

B. Conditions to avoid (e.g. static discharge, shock or vibration, etc) Not available.

C. Incompatible materials Incompatible with strong bases and oxidizing agents.

D. 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

A. Information on likely routes of exposure

- **Respiratory organs** Not available.
- **Mouth** Not available.
- **Eyes** Not available.
- **Skin** Not available.

B. Information on health hazards

- **Acute toxicity (list all possible routes of exposure)** Based on available data, the classification criteria are not met.

- **Corrosivity or irritation to the skin** Based on available data, the classification criteria are not met.
- **Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.
- **Respiratory sensitization** Based on available data, the classification criteria are not met.
- **Skin sensitization** Based on available data, the classification criteria are not met.
- **Carcinogenic properties /Carcinogenicity** Based on available data, the classification criteria are not met.
- **Mutagenic properties /Mutagenicity** 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.

| Components | Species | Test Results |
|---|------------|--------------|
| 2-pyrrolidone (CAS 616-45-5) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Guinea pig | 6500 mg/kg |
| | Rat | 6500 mg/kg |
| arylazopyrazolesulfonate salt # 1 (CAS Proprietary) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 2000 mg/kg |
| <i>Oral</i> | | |
| LD50 | Rat | 81 mg/kg |
| Chronic | | |
| <i>Oral</i> | | |
| NOAEL | Rat | 1 mg/kg |
| Diethylene glycol (CAS 111-46-6) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | 11890 mg/kg |
| <i>Oral</i> | | |
| LD50 | Cat | 3300 mg/kg |
| | Dog | 9000 mg/kg |
| | Guinea pig | 8700 mg/kg |
| | Mouse | 13.3 g/kg |
| | Rabbit | 26.9 g/kg |
| | Rat | 12565 mg/kg |
| <i>Other</i> | | |
| LD50 | Mouse | 9.6 g/kg |
| | Rabbit | 2000 mg/kg |
| | Rat | 7700 mg/kg |
| | | 7.7 g/kg |

Further information Complete toxicity data are not available for this specific formulation

12. Ecological information

A. Ecotoxicity

| Product | Species | Test Results |
|---|----------------|---|
| C6179Series[Y][3] | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Fathead minnow (<i>Pimephales promelas</i>) < 400 mg/l, 96 hours |
| Components | Species | Test Results |
| 2-pyrrolidone (CAS 616-45-5) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours |
| arylazopyrazolesulfonate salt # 1 (CAS Proprietary) | | |
| 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 (<i>Gambusia affinis</i>) > 32000 mg/l, 96 hours |
| Hazardous to the aquatic environment, acute hazard | Not available. | |
| Hazardous to the aquatic environment, long-term hazard | Not available. | |
| B. Persistence/degradability | Not available. | |
| C. Bioaccumulative potential | | |
| Bioaccumulative potential | | |
| Octanol/water partition coefficient log Kow | | |
| 2-pyrrolidone | | -0.85 |
| D. Mobility in soil | Not available. | |
| E. Other adverse effects | Not available. | |
| Aquatic toxicity | | Static acute toxicity (trout), survival (100 mg/L) = 23% Static acute toxicity (trout), survival (10 mg/L) = 93% |

13. Disposal considerations

| | |
|--|---|
| A. Method of disposal | 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 . |
| B. Disposal considerations (including disposal of contaminated containers or packaging) | Not available. |

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

A. Restrictions under the Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacturing

Not regulated.

Harmful Substances Requiring Permission for Manufacture or Use

Not regulated.

Controlled Hazardous Substances

Not regulated.

Harmful Substances Requiring Special Medical Examination

Not regulated.

Workplace Environmental Monitoring Harmful Materials

Not regulated.

Occupational Exposure Limit

Not regulated.

B. Restrictions under the Toxic Chemicals Control Law

Accidental Release Prevention Substances

Not regulated.

Banned Toxic Chemicals

Not regulated.

Observational Chemicals

Not regulated.

Restricted Chemical Substances

Not regulated.

Toxic Chemicals

TRITETRAMETHYLAMMONIUM 2000-1-507 >= 25
4,5-DIHYDRO-5-OXO-1-(4-SULFOPHENYL)-4-[(4-SULFOPHENYL)AZO]-1H-PYRAZOLE-3-CARBOXYLATE (CAS
Proprietary)

C. Restrictions under the Dangerous Substance Safety Management Act

D. Restrictions under the Wastes Control Act

Halogenated Materials in Waste Organic Solvents

Not regulated.

Hazardous Substances

Not regulated.

E. Restrictions under other foreign or domestic laws

Clean Air Conservation Act

Air Pollutants

Not regulated.

Specific Air Pollutants

Not regulated.

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/NDL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

16. Other information

A. Source of information

Not available.

B. Issue date

14-Jun-2015

Revision date

28-Jul-2016

C. Number of revisions and date of most recent revision

28-Jul-2016 (04 revision)

D. Other

Not available.

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.

Manufacturer information

HP Inc.
1501 Page Mill Road
Palo Alto, CA 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 SAFETY DATA SHEET

1. Chemical product and company identification

| | |
|--|---|
| A. Product name | C6179Series[M][3] |
| B. Recommended use and Limitations on use | |
| Recommended use | Inkjet printing |
| Company identification | HP Korea House 23-6 Yoido-dong Youngdeungpo-gu Seoul 150-742, Korea Telephone (02) 2199-0114 |
| | HP Inc. health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-760-710-0048 HP Inc. Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com |
| Issue date | 14-Jun-2015 |
| Revision date | 26-Jul-2016 |
| Version # | 04 |

2. Hazards identification

A. Hazard category/Classification

| | |
|------------------------------|-----------------|
| Physical hazards | Not classified. |
| Health hazards | Not classified. |
| Environmental hazards | Not classified. |

B. Warning label items including precautionary statement

| | |
|----------------------------------|-------|
| • Pictogram | None. |
| • Signal word | None. |
| • Hazard statement | None. |
| • Precautionary statement | |
| Prevention | None |
| Response | None |
| Storage | None |
| Disposal | None |

C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard) Not available.

Other hazards 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.

3. Composition/information on ingredients

| Chemical identity | Common and alternative names | CAS number | ID number | Content in percent (%) |
|-------------------------------|-------------------------------------|-------------------|------------------|-------------------------------|
| Water | | 7732-18-5 | KE-35400 | 60-70 |
| 1,5-pentanediol | | 111-29-5 | KE-27985 | <10 |
| 2-pyrrolidone | | 616-45-5 | KE-29978 | <7.5 |
| magnesium nitrate hexahydrate | | 10377-60-3 | KE-22725 | <7.5 |
| Magenta colorant | | Proprietary | Proprietary | <5 |
| Alkyldiol ethoxylate | | Proprietary | Proprietary | <2.5 |

Composition comments This ink supply contains an aqueous ink formulation.

4. First aid measures

- A. In case of 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.
- B. In case of skin contact** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
- C. In case of inhalation** Remove to fresh air. If symptoms persist, get medical attention.
- D. In case of swallowing** If ingestion of a large amount does occur, seek medical attention.
- E. Note to physician** Not available.
-

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None known.

B. Specific hazards arising from the chemical (example: hazardous combustion products) Not available.

C. Specific methods of fire-fighting Not available.

C. Specific methods of fire-fighting Not available.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency measures Wear appropriate personal protective equipment.

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

C. 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.

7. Handling and storage

A. Precautions for safe handling Avoid contact with skin, eyes and clothing.

B. 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

A. Exposure limit values, biological limit values, etc

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.

B. Appropriate engineering controls Use in a well ventilated area.

C. Personal protective equipment

• **Respiratory protection** Not available.

• **Eye protection** Not available.

• **Hand protection** Not available.

• **Body protection** Not available.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Recommended monitoring procedures

Additional exposure data Exposure limits have not been established for this product.

9. Physical and chemical properties

A. Appearance

Physical state Liquid.

| | |
|---|--|
| Color | Magenta |
| B. Odor | Not available. |
| C. Odor threshold | Not available. |
| D. pH | 6.2 - 6.8 |
| E. Melting point/freezing point | Not available. |
| F. Boiling point, initial boiling point, and boiling range | Not determined |
| G. Flash point | > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup |
| H. Evaporation rate | Not determined |
| I. Flammability (solid, gas) | Not available. |
| J. Upper/lower limit on flammability or explosive limits | |
| Flammability limit - lower (%) | Not determined |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| K. Vapor pressure | Not determined |
| L. Solubility | |
| Solubility (water) | Soluble in water |
| M. Vapor density | >= 1 (air = 1.0) |
| N. Specific gravity | Not available. |
| O. n-octanol/water partition coefficient | Not available. |
| P. Auto-ignition temperature | Not available. |
| Q. Decomposition temperature | Not available. |
| R. Viscosity | >= 2 cp |
| S. Molecular weight | Not available. |
| Other data | |
| Oxidizing properties | Not determined |
| VOC (Weight %) | < 168 g/l |

10. Stability and reactivity

A. Stability and hazardous reaction potential

| | |
|-------------------------------------|--|
| Stability | Stable under recommended storage conditions. |
| Hazardous reaction potential | Will not occur. |

B. Conditions to avoid (e.g. static discharge, shock or vibration, etc) Not available.

C. Incompatible materials Incompatible with strong bases and oxidizing agents.

D. 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

A. Information on likely routes of exposure

- **Respiratory organs** Not available.
- **Mouth** Not available.
- **Eyes** Not available.
- **Skin** Not available.

B. Information on health hazards

- **Acute toxicity (list all possible routes of exposure)** Based on available data, the classification criteria are not met.

| | |
|---|---|
| • Corrosivity or irritation to the skin | Based on available data, the classification criteria are not met. |
| • Serious eye damage/eye irritation | Based on available data, the classification criteria are not met. |
| • Respiratory sensitization | Based on available data, the classification criteria are not met. |
| • Skin sensitization | Based on available data, the classification criteria are not met. |
| • Carcinogenic properties /Carcinogenicity | Based on available data, the classification criteria are not met. |
| • Mutagenic properties /Mutagenicity | 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. |

| Components | Species | Test Results |
|------------------------------|------------|--------------|
| 2-pyrrolidone (CAS 616-45-5) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Guinea pig | 6500 mg/kg |
| | Rat | 6500 mg/kg |

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

A. Ecotoxicity

| Product | Species | Test Results |
|-------------------|---------|--|
| C6179Series[M][3] | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Fathead minnow (<i>Pimephales promelas</i>) < 400 mg/l, 96 hours |
| Components | Species | Test Results |

| | | | |
|------------------------------|------|-------------------------------------|----------------------|
| 2-pyrrolidone (CAS 616-45-5) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (<i>Daphnia pulex</i>) | 13.21 mg/l, 48 hours |

Hazardous to the aquatic environment, acute hazard Not available.

Hazardous to the aquatic environment, long-term hazard Not available.

B. Persistence/degradability Not available.

C. Bioaccumulative potential

| | |
|--|-------|
| Bioaccumulative potential | |
| Octanol/water partition coefficient log Kow | |
| 2-pyrrolidone | -0.85 |

D. Mobility in soil Not available.

E. Other adverse effects Not available.

Aquatic toxicity Static acute toxicity (trout), survival (100 mg/L) = 100%
Static acute toxicity (trout), survival (10 mg/L) = 100%

13. Disposal considerations

A. Method of disposal

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>.

B. Disposal considerations (including disposal of contaminated containers or packaging)

Not available.

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

A. Restrictions under the Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacturing

Not regulated.

Harmful Substances Requiring Permission for Manufacture or Use

Not regulated.

Controlled Hazardous Substances

Not regulated.

Harmful Substances Requiring Special Medical Examination

Not regulated.

Workplace Environmental Monitoring Harmful Materials

Not regulated.

Occupational Exposure Limit

Not regulated.

B. Restrictions under the Toxic Chemicals Control Law

Accidental Release Prevention Substances

Not regulated.

Banned Toxic Chemicals

Not regulated.

Observational Chemicals

Not regulated.

Restricted Chemical Substances

Not regulated.

Toxic Chemicals

Not regulated.

C. Restrictions under the Dangerous Substance Safety Management Act

D. Restrictions under the Wastes Control Act

Halogenated Materials in Waste Organic Solvents

Not regulated.

Hazardous Substances

Not regulated.

E. Restrictions under other foreign or domestic laws

Clean Air Conservation Act

Air Pollutants

Not regulated.

Specific Air Pollutants

Not regulated.

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

A. Source of information

Not available.

B. Issue date

14-Jun-2015

Revision date

26-Jul-2016

C. Number of revisions and date of most recent revision

26-Jul-2016 (04 revision)

D. Other

Not available.

Disclaimer

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Manufacturer information

HP Inc.
1501 Page Mill Road
Palo Alto, CA 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 SAFETY DATA SHEET

1. Chemical product and company identification

A. Product name C6179Series[C][3]

B. Recommended use and Limitations on use

Recommended use Inkjet printing

Company identification HP Korea House
23-6 Yoido-dong
Youngdeungpo-gu
Seoul 150-742, Korea
Telephone (02) 2199-0114

HP Inc. health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP Inc. Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: hpcustomer.inquiries@hp.com

Issue date 14-Jun-2015

Revision date 26-Jul-2016

Version # 03

2. Hazards identification

A. Hazard category/Classification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

B. Warning label items including precautionary statement

- **Pictogram** None.
- **Signal word** None.
- **Hazard statement** None.
- **Precautionary statement**
 - Prevention** None
 - Response** None
 - Storage** None
 - Disposal** None

C. Other hazards not included in the hazard category criteria (e.g. dust explosion hazard) Not available.

Other hazards 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.

3. Composition/information on ingredients

| Chemical identity | Common and alternative names | CAS number | ID number | Content in percent (%) |
|-------------------------------|------------------------------|-------------|-------------|------------------------|
| Water | | 7732-18-5 | KE-35400 | 60-70 |
| 1,5-pentanediol | | 111-29-5 | KE-27985 | <10 |
| 2-pyrrolidone | | 616-45-5 | KE-29978 | <7.5 |
| magnesium nitrate hexahydrate | | 10377-60-3 | KE-22725 | <7.5 |
| Alkyldiol ethoxylate | | Proprietary | Proprietary | <2.5 |
| Cyan colorant | | Proprietary | Proprietary | <2.5 |

| Chemical identity | Common and alternative names | CAS number | ID number | Content in percent (%) |
|--------------------------------------|------------------------------|-------------|-------------|------------------------|
| Substituted triphenylmethane salt #1 | | Proprietary | Proprietary | <2.5 |

Composition comments This ink supply contains an aqueous ink formulation.

4. First aid measures

- A. In case of 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.
- B. In case of skin contact** Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
- C. In case of inhalation** Remove to fresh air. If symptoms persist, get medical attention.
- D. In case of swallowing** If ingestion of a large amount does occur, seek medical attention.
- E. Note to physician** Not available.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None known.

B. Specific hazards arising from the chemical (example: hazardous combustion products) Not available.

C. Specific methods of fire-fighting Not available.

C. Specific methods of fire-fighting Not available.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency measures Wear appropriate personal protective equipment.

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

C. 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.

7. Handling and storage

A. Precautions for safe handling Avoid contact with skin, eyes and clothing.

B. 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

A. Exposure limit values, biological limit values, etc

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.

B. Appropriate engineering controls Use in a well ventilated area.

C. Personal protective equipment

- **Respiratory protection** Not available.
- **Eye protection** Not available.
- **Hand protection** Not available.
- **Body protection** Not available.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Recommended monitoring procedures

Additional exposure data Exposure limits have not been established for this product.

9. Physical and chemical properties

A. Appearance

Physical state Liquid.

Color Cyan

B. Odor Not available.

C. Odor threshold Not available.

D. pH 6.2 - 6.8

E. Melting point/freezing point Not available.

F. Boiling point, initial boiling point, and boiling range Not determined

G. Flash point ≥ 200.0 °F (≥ 93.3 °C) Pensky-Martens Closed Cup

H. Evaporation rate Not determined

I. Flammability (solid, gas) Not available.

J. Upper/lower limit on flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

K. Vapor pressure Not determined

L. Solubility

Solubility (water) Soluble in water

M. Vapor density ≥ 1 (air = 1.0)

N. Specific gravity Not available.

O. n-octanol/water partition coefficient Not available.

P. Auto-ignition temperature Not available.

Q. Decomposition temperature Not available.

R. Viscosity ≥ 2 cp

S. Molecular weight Not available.

Other data

Oxidizing properties Not determined

VOC (Weight %) < 168 g/l

10. Stability and reactivity

A. Stability and hazardous reaction potential

Stability Stable under recommended storage conditions.

Hazardous reaction potential Will not occur.

B. Conditions to avoid (e.g. static discharge, shock or vibration, etc) Not available.

C. Incompatible materials Incompatible with strong bases and oxidizing agents.

D. 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

A. Information on likely routes of exposure

• **Respiratory organs** Not available.

• **Mouth** Not available.

- **Eyes** Not available.
- **Skin** Not available.

B. Information on health hazards

- **Acute toxicity (list all possible routes of exposure)** Based on available data, the classification criteria are not met.
- **Corrosivity or irritation to the skin** Based on available data, the classification criteria are not met.
- **Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.
- **Respiratory sensitization** Based on available data, the classification criteria are not met.
- **Skin sensitization** Based on available data, the classification criteria are not met.
- **Carcinogenic properties /Carcinogenicity** Based on available data, the classification criteria are not met.

IARC Monographs. Overall Evaluation of Carcinogenicity

Substituted triphenylmethane salt #<@1> (CAS 3 Not classifiable as to carcinogenicity to humans. Proprietary)

- **Mutagenic properties /Mutagenicity** 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.

| Components | Species | Test Results |
|------------|---------|--------------|
|------------|---------|--------------|

2-pyrrolidone (CAS 616-45-5)

Acute

Oral

LD50

Guinea pig

6500 mg/kg

Rat

6500 mg/kg

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

A. Ecotoxicity

| Product | Species | Test Results |
|-------------------|---------|---|
| C6179Series[C][3] | | |
| Aquatic | | |
| <i>Acute</i> | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) < 400 mg/l, 96 hours |

| Components | Species | Test Results |
|---------------------------------|---------|---|
| 2-pyrrolidone (CAS 616-45-5) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (Daphnia pulex) 13.21 mg/l, 48 hours |
| Cyan colorant (CAS Proprietary) | | |
| Aquatic | | |
| Crustacea | EC50 | Daphnia 50 - 100 mg/l, 48 Hours |
| Fish | LC50 | Coho salmon,silver salmon (Oncorhynchus kisutch) 332 mg/l, 96 hours |

Hazardous to the aquatic environment, acute hazard Not available.

| | |
|---|--|
| Hazardous to the aquatic environment, long-term hazard | Not available. |
| B. Persistence/degradability | Not available. |
| C. Bioaccumulative potential | |
| Bioaccumulative potential | |
| Octanol/water partition coefficient log Kow | |
| 2-pyrrolidone | -0.85 |
| D. Mobility in soil | Not available. |
| E. Other adverse effects | Not available. |
| Aquatic toxicity | Static acute toxicity (trout), survival (100 mg/L) = 67% Static acute toxicity (trout), survival (10 mg/L) = 100% |

13. Disposal considerations

| | |
|--|---|
| A. Method of disposal | Do not dispose of together with general office waste. 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 . |
| B. Disposal considerations (including disposal of contaminated containers or packaging) | Not available. |

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

| |
|---|
| A. Restrictions under the Industrial Safety and Health Law |
| Harmful Substances Prohibited from Manufacturing |
| Not regulated. |
| Harmful Substances Requiring Permission for Manufacture or Use |
| Not regulated. |
| Controlled Hazardous Substances |
| Not regulated. |
| Harmful Substances Requiring Special Medical Examination |
| Not regulated. |
| Workplace Environmental Monitoring Harmful Materials |
| Not regulated. |
| Occupational Exposure Limit |
| Not regulated. |
| B. Restrictions under the Toxic Chemicals Control Law |
| Accidental Release Prevention Substances |
| Not regulated. |
| Banned Toxic Chemicals |
| Not regulated. |
| Observational Chemicals |
| Not regulated. |
| Restricted Chemical Substances |
| Not regulated. |

Toxic Chemicals

Not regulated.

C. Restrictions under the Dangerous Substance Safety Management Act**D. Restrictions under the Wastes Control Act****Halogenated Materials in Waste Organic Solvents**

Not regulated.

Hazardous Substances

Not regulated.

E. Restrictions under other foreign or domestic laws**Clean Air Conservation Act****Air Pollutants**

Not regulated.

Specific Air Pollutants

Not regulated.

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**A. Source of information**

Not available.

B. Issue date

14-Jun-2015

Revision date

26-Jul-2016

C. Number of revisions and date of most recent revision

26-Jul-2016 (03 revision)

D. Other

Not available.

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.

Manufacturer information

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Explanation of abbreviations

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