1. Identification

Product identifier: CH590Series[C][2]

Other means of identification: Not available.

Recommended use: Inkjet printing

Recommended restrictions: None known.

Company identification: HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
Telephone 650-857-5020

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

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Hazard symbol: None.

Signal word: None.

Hazard statement: Not available.

Precautionary statement

Prevention: Not available.

Response: Not available.

Storage: Not available.

Disposal: Not available.

Hazard(s) not otherwise classified (HNOC)

Potential routes of overexposure to this product are skin and eye contact. Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Complete toxicity data are not available for this specific formulation.

Supplemental information

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

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>80-90</td>
<td></td>
</tr>
<tr>
<td>Cyclo Amide</td>
<td>Proprietary</td>
<td>&lt; 10</td>
<td></td>
</tr>
<tr>
<td>Pigment Blue</td>
<td>Proprietary</td>
<td>&lt; 2.5</td>
<td></td>
</tr>
<tr>
<td>2,4,7,9-Tetramethyl-5-decyne-4,7-diol</td>
<td>126-86-3</td>
<td>&lt;1</td>
<td></td>
</tr>
</tbody>
</table>

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 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 firefighters**
Not available.

**Specific methods**
Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Wear appropriate personal protective equipment.

**Methods and materials for containment and cleaning up**
Not available.

**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**

<table>
<thead>
<tr>
<th>Protection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye/face protection</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Skin protection</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hand protection</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Respiratory protection</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Thermal hazards</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**General hygiene considerations**
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Cyan</td>
</tr>
</tbody>
</table>
Odor Not available.
Odor threshold Not available.
PH 8.8 - 9.1
Melting point/freezing point Not available.
Initial boiling point and boiling range Not available.
Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits
Flammability limit - lower (%) Not available.
Flammability limit - upper (%) Not available.
Explosive limit - lower (%) Not available.
Explosive limit - upper (%) Not available.
Vapor pressure Not available.
Solubility(ies)
Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity 3.2 - 3.3 cP
Other information For other VOC regulatory data/information see Section 15.
VOC (Weight %) 11 g/L US 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 products Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may yield oxides of phosphorus. hydrogen fluoride fluorinated 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.
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

12. Ecological information
Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH590Series[C][2]</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acute</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LD50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 750 mg/l, 96 hr</td>
</tr>
</tbody>
</table>

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. 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 federal regulations  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.

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
Hazardous chemical
No
Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.
US state regulations
US. California Proposition 65
Not Listed.
Other information
VOC content (less water, less exempt compounds) = 82 g/L (U.S. requirement, not for emissions)
VOC data based on formulation (Organic compounds minus solids)
US EPA Method 24
Regulatory information
All chemical substances in this product are notified or exempt from notification under chemical substance notification laws in the following countries: Australia, Canada, China, European Union, Japan, Korea, Switzerland, USA.

16. Other information, including date of preparation or last revision
Issue date 14-Jun-2015
Revision date 28-Aug-2016
Version # 03
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
1. Identification

Product identifier: CH590Series[M][2]
Other means of identification: Not available.
Recommended use: Inkjet printing
Recommended restrictions: None known.
Company identification:
HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
Telephone 650-857-5020
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

2. Hazard(s) identification

Physical hazards: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements:
- Hazard symbol: None.
- Signal word: None.
- Hazard statement: Not available.
- Precautionary statement:
  Prevention: Not available.
  Response: Not available.
  Storage: Not available.
  Disposal: Not available.

Hazard(s) not otherwise classified (HNOC):
Potential routes of overexposure to this product are skin and eye contact. Inhalation of vapor and ingestion are not expected to be significant routes of exposure for this product under normal use conditions. Complete toxicity data are not available for this specific formulation.

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

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td>7732-18-5</td>
<td>75-85</td>
</tr>
<tr>
<td>Cyclo Amide</td>
<td>Proprietary</td>
<td>&lt; 10</td>
<td></td>
</tr>
<tr>
<td>Magenta colorant</td>
<td>Proprietary</td>
<td>&lt; 5</td>
<td></td>
</tr>
<tr>
<td>2,4,7,9-Tetramethyl-5-decyne-4,7-di</td>
<td></td>
<td>126-86-3</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
ol

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 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 firefighters  Not available.
Specific methods  Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures  Wear appropriate personal protective equipment.
Methods and materials for containment and cleaning up  Not available.
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

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  Liquid.
Color  Magenta
Odor: Not available.
Odor threshold: Not available.

pH: 8.8 - 9.1

Melting point/freezing point: Not available.
Initial boiling point and boiling range: Not available.

Flash point: > 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup

Evaporation rate: Not available.
Flammability (solid, gas): Not available.

**Upper/lower flammability or explosive limits**

Flammability limit - lower (%): Not available.
Flammability limit - upper (%): Not available.
Explosive limit - lower (%): Not available.
Explosive limit - upper (%): Not available.

Vapor pressure: Not available.

**Solubility(ies)**

Solubility (water): Not available.
Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature: Not available.
Decomposition temperature: Not available.

Viscosity: 3.2 - 3.3 cP

Other information: For other VOC regulatory data/information see Section 15.
VOC (Weight %): 43 g/L US 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 products: Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may yield oxides of phosphorus, hydrogen fluoride, fluorinated 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.

Respiratory or skin sensitzation:

Respiratory sensitization: Based on available data, the classification criteria are not met.
Skin sensitization: Based on available data, the classification criteria are not met.
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Classification Criteria</th>
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</thead>
<tbody>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not met based on available data.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not met based on available data.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not met based on available data.</td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>Not met based on available data.</td>
</tr>
<tr>
<td>- Single exposure</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity</td>
<td>Not met based on available data.</td>
</tr>
<tr>
<td>- Repeated exposure</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not met based on available data.</td>
</tr>
<tr>
<td>Further information</td>
<td>Complete toxicity data are not available for this specific formulation</td>
</tr>
</tbody>
</table>

12. Ecological information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Information</th>
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</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Not available.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

13. Disposal considerations

<table>
<thead>
<tr>
<th>Disposal instructions</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 <a href="http://www.hp.com/recycle">http://www.hp.com/recycle</a>.</td>
<td></td>
</tr>
</tbody>
</table>

14. Transport information

<table>
<thead>
<tr>
<th>DOT</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not regulated as dangerous goods.</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>Information</td>
</tr>
<tr>
<td>Not regulated as dangerous goods.</td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>Information</td>
</tr>
<tr>
<td>Not regulated as dangerous goods.</td>
<td></td>
</tr>
<tr>
<td>ADR</td>
<td>Information</td>
</tr>
<tr>
<td>Not regulated as dangerous goods.</td>
<td></td>
</tr>
<tr>
<td>Further information</td>
<td>Information</td>
</tr>
<tr>
<td>Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.</td>
<td></td>
</tr>
</tbody>
</table>

15. Regulatory information

<table>
<thead>
<tr>
<th>US federal regulations</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>US TSCA 12(b): Does not contain listed chemicals.</td>
<td>Information</td>
</tr>
<tr>
<td>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>SARA 304 Emergency release notification</td>
<td>Not regulated.</td>
</tr>
<tr>
<td>Superfund Amendments and Reauthorization Act of 1986 (SARA)</td>
<td>Information</td>
</tr>
<tr>
<td>Hazard categories</td>
<td>Information</td>
</tr>
<tr>
<td>Immediate Hazard - No</td>
<td></td>
</tr>
<tr>
<td>Delayed Hazard - No</td>
<td></td>
</tr>
<tr>
<td>Fire Hazard - No</td>
<td></td>
</tr>
<tr>
<td>Pressure Hazard - No</td>
<td></td>
</tr>
<tr>
<td>Reactivity Hazard - No</td>
<td></td>
</tr>
<tr>
<td>SARA 302 Extremely hazardous substance</td>
<td>Not listed.</td>
</tr>
<tr>
<td>SARA 311/312 Hazardous chemical</td>
<td>No</td>
</tr>
<tr>
<td>Other federal regulations</td>
<td>Information</td>
</tr>
<tr>
<td>Safe Drinking Water Act (SDWA)</td>
<td>Not regulated.</td>
</tr>
</tbody>
</table>
Other information

VOC content (less water, less exempt compounds) = 258 g/L (U.S. requirement, not for emissions)
VOC data based on formulation (Organic compounds minus solids)
US EPA Method 24

Regulatory information

All chemical substances in this product are notified or exempt from notification under chemical substance notification laws in the following countries: Australia, Canada, China, European Union, Japan, Korea, Switzerland, USA.

16. Other information, including date of preparation or last revision

Issue date: 15-Jun-2015
Revision date: 29-Aug-2016
Version #: 03

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