1. Identification

Important information

*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***

Product identifier: C4903 Series

Other means of identification: None.

Recommended use: Inkjet printing

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

HP Inc.
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States

Telephone: 650-857-1501

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)

None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA. Complete toxicity data are not available for this specific formulation. 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.

Supplemental information

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

2-pyrrolidone: OSHA Hazard Communication Standard cut-off value, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.
3. Composition/information on ingredients

<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>Hydroxy alkylated lactam*</td>
<td></td>
<td>Proprietary*</td>
<td>&lt;15</td>
</tr>
<tr>
<td>Aliphatic diol</td>
<td></td>
<td>Proprietary*</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Cyan colorant*</td>
<td></td>
<td>Proprietary*</td>
<td>&lt;5</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;3</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).

2-pyrrolidone: OSHA Hazard Communication Standard cut-off value 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

*Proprietary

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. Get medical attention if irritation develops or persists.

Eye contact
Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.

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

Most important symptoms/effects, acute and delayed
Not available.

General information
Wash affected areas thoroughly with mild soap and water.

5. Fire-fighting measures

Suitable extinguishing media
Dry chemical, CO2, water spray or regular 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
None established.

6. Accidental release measures

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

Methods and materials for containment and cleaning up
Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

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

7. Handling and storage

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

Conditions for safe storage, including any incompatibilities
Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliphatic diol</td>
<td>TWA</td>
<td>10 mg/m3</td>
</tr>
</tbody>
</table>
No biological exposure limits noted for the ingredient(s).

Exposure limits have not been established for this product.

Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection Not available.
Skin protection Not available.
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.
Form Not available.
Color Cyan

Odor Not available.
Odor threshold Not available.
pH 8.5 - 9.5

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point > 212.0 °F (> 100.0 °C) Pensky-Martens Closed Cup US EPA Method 1020

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.

Vapor density 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 < 291 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 with strong bases and oxidizing agents.

Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

- **Inhalation**: Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
- **Skin contact**: Contact with skin may result in mild irritation.
- **Eye contact**: Contact with eyes may result in mild irritation.
- **Ingestion**: Health injuries are not known or expected under normal use.

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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Non irritant in rabbit (OECD 404) Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td>Not classified as an irritant according to, OECD 405. Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitization</strong></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Respiratory sensitization</strong></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Skin sensitization</strong></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
</tbody>
</table>

**IARC Monographs. Overall Evaluation of Carcinogenicity**

- Not listed.


- Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

- Not listed.

**Reproductive toxicity**

- 2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).

**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

**Ecotoxicity**

- This product is highly soluble in water.
2-pyrrolidone (CAS 616-45-5)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
<td>Crustacea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC50</td>
<td>Water flea (Daphnia pulex)</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
Not available.

**Bioaccumulative potential**
Not available.

**Partition coefficient n-octanol / water (log Kow)**
- 2-pyrrolidone: -0.85
- Aliphatic diol: -0.106

**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**
- **UN number**: Not available.
- **UN proper shipping name**: Not Regulated
- **Transport hazard class(es)**
  - **Class**: Not available.
  - **Subsidiary risk**: -
  - **Packing group**: Not available.
  - **Environmental hazards**: Not available.
  - **Marine pollutant**: No
- **Special precautions for user**: Not available.

**IATA**
- **UN number**: Not available.
- **UN proper shipping name**: Not Regulated
- **Transport hazard class(es)**
  - **Class**: Not available.
  - **Subsidiary risk**: -
  - **Packing group**: Not available.
  - **Environmental hazards**: No
- **Special precautions for user**: Not available.

**IMDG**
- **UN number**: Not available.
- **UN proper shipping name**: Not Regulated
- **Transport hazard class(es)**
  - **Class**: Not available.
  - **Subsidiary risk**: -
  - **Packing group**: Not available.
  - **Transport hazard class(es)**
    - **Marine pollutant**: No
  - **EmS**: Not available.
- **Special precautions for user**: Not available.

**ADR**
- **UN number**: Not available.
- **UN proper shipping name**: Not Regulated
- **Transport hazard class(es)**
  - **Class**: Not available.
  - **Subsidiary risk**: -
  - **Hazard No. (ADR)**: Not available.
Tunnel restriction code: Not available.
Packing group: Not available.
Environmental hazards: Not available.
Special precautions for user: No

Further information:
- Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

15. Regulatory information

US federal regulations
- US TSCA 12(b): Does not contain listed chemicals.
  - Toxic Substances Control Act (TSCA)
    - 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.
    - Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
- SARA 302 Extremely hazardous substance
  - Not listed.
- SARA 311/312 Hazardous chemical
  - No

Other federal regulations
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  - No intentionally added HAP substances.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  - Not regulated.

Safe Drinking Water Act (SDWA)
- Not regulated.

Other information
- VOC content (less water, less exempt compounds) = 1148 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: 29-Sep-2018
Revision date: 18-Jul-2020
Version #: 05
Other information: This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).
Disclaimer

This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs. 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.

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