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
CN052Series

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
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>65-80</td>
</tr>
<tr>
<td>Hydroxy alkylated lactam*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;15</td>
</tr>
<tr>
<td>Aliphatic diol</td>
<td>Proprietary</td>
<td></td>
<td>&lt;5</td>
</tr>
<tr>
<td>Yellow pigment*</td>
<td>Proprietary*</td>
<td></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.

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**
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>

Material name: CN052Series

12094  Version #: 10  Revision date: 05-Jul-2020  Issue date: 16-Apr-2015
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:
  - Hand protection: Not available.
  - Other: Not available.
- Respiratory protection: Not available.
- Thermal hazards: Not available.

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

**Appearance**
- Physical state: Liquid.
- Form: Not available.
- Color: Yellow
- 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: < 297 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>Acute</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>
</tbody>
</table>

**Skin corrosion/irritation**: Non irritant in rabbit (OECD 404) Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation**: Not classified as an irritant according to, OECD 405. 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**
  - IARC Monographs. Overall Evaluation of Carcinogenicity
    - Not listed.
    - Not listed.
  - US. National Toxicology Program (NTP) Report on Carcinogens
    - Not listed.

**Reproductive toxicity**: Based on available data, the classification criteria are not met.

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.

<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>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>13.21 mg/l, 48 hours</td>
</tr>
</tbody>
</table>
Persistence and degradability

Bioaccumulative potential

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

Mobility in soil

Other adverse effects

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### 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](http://www.hp.com/recycle).

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### 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**: No
  - **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**: No
  - **Special precautions for user**: Not available.
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 regulated.
- 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) = 1141 g/L (U.S. requirement, not for emissions)
- VOC data based on formulation (Organic compounds minus solids)

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

Issue date 16-Apr-2015
Revision date 05-Jul-2020
Version # 10

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. 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.

Revision information

1. Product and Company Identification: Alternate Trade Names
### Explanation of abbreviations

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