1. Identification

Product identifier: X4D15Series

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: 650-857-5020

HP Inc. health effects line (Toll-free within the US): 1-800-457-4209
(Toll-free within the US): 1-800-474-6836
(Direct) 1-760-710-0048
(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):

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.

None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA.

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>70-90</td>
</tr>
<tr>
<td>Chemical name</td>
<td>Common name and synonyms</td>
<td>CAS number</td>
<td>%</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>-----------</td>
<td>---</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Pigment Yellow*</td>
<td>Proprietary*</td>
<td></td>
<td>&lt;5</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. 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.

## 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
None known.

### Specific protective equipment and precautions for firefighters
None available.

### Specific methods
Not available.

## 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
This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

### 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**: Not available.
- **Form**: Not available.
- **Color**: Yellow
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: 9 - 9.6
- **Melting point/freezing point**: Not available.
- **Initial boiling point and boiling range**: Not available.
- **Flash point**: > 230.0 °F (> 110.0 °C)
- **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
- **Vapor pressure**: Not available.

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

#### Auto-ignition temperature
- **Auto-ignition temperature**: Not available.

#### Decomposition temperature
- **Decomposition temperature**: Not available.

#### Viscosity
- **Viscosity**: Not available.

#### Other information
- **Oxidizing properties**: Not determined
- **VOC**: 205 g/l

### 10. Stability and reactivity

#### 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.**

### 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

Information on toxicological effects

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

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

2-pyrrolidone (CAS 616-45-5)

Acute
Oral
LD50

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

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

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

Specific target organ toxicity - single exposure
Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure
Based on available data, the classification criteria are not met.

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

Further information
Complete toxicity data are not available for this specific formulation
Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Ecological information

Aquatic toxicity
No information available.

Ecotoxicity

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia pulex) 13.21 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability
Not available.

Bioaccumulative potential
Not available.

Partition coefficient n-octanol / water (log Kow)

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone</td>
<td>-0.85</td>
</tr>
</tbody>
</table>

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.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not 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
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
Not listed

Other information
VOC content (less water, less exempt compounds) = 758 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
07-Aug-2017

Revision date
17-May-2018

Version #
03

Other information
This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).
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.

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.

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>