1. Identification

Product identifier: Q2381A
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: Reproductive toxicity (fertility, the unborn child) Category 1B
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.
Label elements:

Signal word: Danger
Hazard statement: May damage fertility or the unborn child.
Precautionary statement:
Prevention: Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.
Response: IF exposed or concerned: Get medical advice/attention.
Storage: Store locked up.
Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

Supplemental information:
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>Mixtures</th>
<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></td>
<td>7732-18-5</td>
<td>70-85</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td></td>
<td>616-45-5</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Alkyldiol</td>
<td></td>
<td></td>
<td>Proprietary</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Pigment Blue*</td>
<td></td>
<td></td>
<td>Proprietary*</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).

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**
Remove 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**
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

**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.
9. Physical and chemical properties

Appearance
- Physical state: Liquid.
- Form: Not available.
- Color: Cyan
- Odor: Not available.
- Odor threshold: Not available.
- pH: 8 - 8.4

Melting point/freezing point: Not available.
Initial boiling point and boiling range: Not determined
Flash point: >= 200.0 °F (>= 93.3 °C) Pensky-Martens Closed Cup
Evaporation rate: Not determined
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 determined
Vapor density: >= 1 (air = 1.0)
Solubility(ies)
- Solubility (water): Soluble in water
- Partition coefficient (n-octanol/water): Not available.

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

Other information: For other VOC regulatory data/information see Section 15.
- Oxidizing properties: Not determined
- Percent volatile: 8 % estimated
- Specific gravity: 1 - 1.2
- VOC: < 133 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 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
Not available.

Information on toxicological effects

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

Components | Species | Test Results
--- | --- | ---
2-pyrrolidone (CAS 616-45-5)
  Acute
    Oral
    LD50
    Rat
    > 5000 mg/kg

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

Serious eye damage/eye irritation
Not classified as an irritant according to, OECD 405.

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 1910.1001-1053)
  Not listed.

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

Reproductive toxicity
May damage fertility or the unborn child.

  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

Aquatic toxicity
This product has not been tested for ecological effects.

Ecotoxicity

<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>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td>EC50</td>
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</tbody>
</table>

Persistence and degradability
Not available.
Bioaccumulative potential
Partition coefficient n-octanol / water (log Kow)
2-pyrrolidone -0.85

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.

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 Not available.
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.
Environmental hazards 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.

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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)  
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)  
SARA 302 Extremely hazardous substance  
Not listed.

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)  
VOC content (less water, less exempt compounds) = < 602 g/L (U.S. requirement, not for emissions)  
VOC data based on formulation (Organic compounds minus solids)

Other 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: 08-Apr-2015  
Revision date: 10-Jun-2020  
Version #: 09  
Other information: This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

Disclaimer  
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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.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Name</th>
</tr>
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<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>
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<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>