



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Q2381A  
**Other means of identification** None.  
**Recommended use** Inkjet printing  
**Recommended restrictions** None known.  
**Manufacturer/Importer/Supplier/Distributor information**  
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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  
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**(Toll-free within the US)** 1-800-474-6836  
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**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.

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### 3. Composition/information on ingredients

#### Mixtures

| Chemical name | Common name and synonyms | CAS number   | %     |
|---------------|--------------------------|--------------|-------|
| Water         |                          | 7732-18-5    | 70-85 |
| 2-pyrrolidone |                          | 616-45-5     | <10   |
| Alkyldiol     |                          | Proprietary  | <5    |
| Pigment Blue* |                          | Proprietary* | <5    |

#### 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

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### 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.

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### 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.

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### 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.

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### 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.

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### 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.

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|                                       |                                                                         |
|---------------------------------------|-------------------------------------------------------------------------|
| <b>Skin protection</b>                |                                                                         |
| <b>Hand protection</b>                | Not available.                                                          |
| <b>Other</b>                          | Use personal protective equipment to minimize exposure to skin and eye. |
| <b>Respiratory protection</b>         | Not available.                                                          |
| <b>Thermal hazards</b>                | Not available.                                                          |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice.  |

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## 9. Physical and chemical properties

### Appearance

|                                                     |                                                           |
|-----------------------------------------------------|-----------------------------------------------------------|
| <b>Physical state</b>                               | Liquid.                                                   |
| <b>Form</b>                                         | Not available.                                            |
| <b>Color</b>                                        | Cyan                                                      |
| <b>Odor</b>                                         | Not available.                                            |
| <b>Odor threshold</b>                               | Not available.                                            |
| <b>pH</b>                                           | 8 - 8.4                                                   |
| <b>Melting point/freezing point</b>                 | Not available.                                            |
| <b>Initial boiling point and boiling range</b>      | Not determined                                            |
| <b>Flash point</b>                                  | >= 200.0 °F (>= 93.3 °C) Pensky-Martens Closed Cup        |
| <b>Evaporation rate</b>                             | Not determined                                            |
| <b>Flammability (solid, gas)</b>                    | Not available.                                            |
| <b>Upper/lower flammability or explosive limits</b> |                                                           |
| <b>Flammability limit - lower (%)</b>               | Not available.                                            |
| <b>Flammability limit - upper (%)</b>               | Not available.                                            |
| <b>Explosive limit - lower (%)</b>                  | Not available.                                            |
| <b>Explosive limit - upper (%)</b>                  | Not available.                                            |
| <b>Vapor pressure</b>                               | Not determined                                            |
| <b>Vapor density</b>                                | >= 1 (air = 1.0)                                          |
| <b>Solubility(ies)</b>                              |                                                           |
| <b>Solubility (water)</b>                           | Soluble in water                                          |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                                            |
| <b>Auto-ignition temperature</b>                    | Not available.                                            |
| <b>Decomposition temperature</b>                    | Not available.                                            |
| <b>Viscosity</b>                                    | Not available.                                            |
| <b>Other information</b>                            | For other VOC regulatory data/information see Section 15. |
| <b>Oxidizing properties</b>                         | Not determined                                            |
| <b>Percent volatile</b>                             | 8 % estimated                                             |
| <b>Specific gravity</b>                             | 1 - 1.2                                                   |
| <b>VOC</b>                                          | < 133 g/L                                                 |

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## 10. Stability and reactivity

|                                           |                                                                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | Not available.                                                                                                                                |
| <b>Chemical stability</b>                 | Stable under recommended storage conditions.                                                                                                  |
| <b>Possibility of hazardous reactions</b> | Will not occur.                                                                                                                               |
| <b>Conditions to avoid</b>                | Not available.                                                                                                                                |
| <b>Incompatible materials</b>             | Incompatible with strong bases and oxidizing agents.                                                                                          |
| <b>Hazardous decomposition products</b>   | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |

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## 11. Toxicological information

### Information on likely routes of exposure

|                     |                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| <b>Skin contact</b> | Contact with skin may result in mild irritation.                                                   |
| <b>Eye contact</b>  | Contact with eyes may result in mild irritation.                                                   |
| <b>Ingestion</b>    | 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.

| <b>Components</b> | <b>Species</b> | <b>Test Results</b> |
|-------------------|----------------|---------------------|
|-------------------|----------------|---------------------|

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

#### **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.

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## 12. Ecological information

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

### Ecotoxicity

| <b>Components</b>            | <b>Species</b>                  | <b>Test Results</b>  |
|------------------------------|---------------------------------|----------------------|
| 2-pyrrolidone (CAS 616-45-5) |                                 |                      |
| <b>Aquatic</b>               |                                 |                      |
| Crustacea                    | EC50 Water flea (Daphnia pulex) | 13.21 mg/l, 48 hours |

**Persistence and degradability** Not available.

|                                                          |                |
|----------------------------------------------------------|----------------|
| <b>Bioaccumulative potential</b>                         | Not available. |
| <b>Partition coefficient n-octanol / water (log Kow)</b> |                |
| 2-pyrrolidone                                            | -0.85          |
| <b>Mobility in soil</b>                                  | Not available. |
| <b>Other adverse effects</b>                             | Not available. |

### 13. Disposal considerations

|                              |                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions</b> | Do not allow this material to drain into sewers/water supplies.<br>Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 14. Transport information

#### DOT

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

#### IATA

|                                     |                |
|-------------------------------------|----------------|
| <b>UN number</b>                    | Not available. |
| <b>UN proper shipping name</b>      | Not Regulated  |
| <b>Transport hazard class(es)</b>   |                |
| <b>Class</b>                        | Not available. |
| <b>Subsidiary risk</b>              | -              |
| <b>Packing group</b>                | Not available. |
| <b>Environmental hazards</b>        | No             |
| <b>Special precautions for user</b> | Not available. |

#### IMDG

|                                     |                |
|-------------------------------------|----------------|
| <b>UN number</b>                    | Not available. |
| <b>UN proper shipping name</b>      | Not Regulated  |
| <b>Transport hazard class(es)</b>   |                |
| <b>Class</b>                        | Not available. |
| <b>Subsidiary risk</b>              | -              |
| <b>Packing group</b>                | Not available. |
| <b>Transport hazard class(es)</b>   |                |
| <b>Marine pollutant</b>             | No             |
| <b>EmS</b>                          | Not available. |
| <b>Special precautions for user</b> | Not available. |

#### ADR

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

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| <b>US federal regulations</b> | 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 listed.

**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)** Not regulated.

**Other information** 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)

**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.

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**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).

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## Explanation of abbreviations

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