1. Identification

Product identifier: V1Q60Series
Other means of identification: Not available.
Recommended use: 3D Printing
Recommended restrictions: None known.
Company identification: 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
(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): Complete toxicity data are not available for this specific formulation.

Supplemental information: 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.

Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

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>70-80</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;20</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).

Carbon black is present only in a bound form in this preparation.

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 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>Carbon black (CAS 1333-86-4)</td>
<td>PEL</td>
<td>3.5 mg/m3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Inhalable fraction</td>
</tr>
</tbody>
</table>
US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

**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**
  Liquid.
- **Color**
  Black.
- **Odor**
  Not available.
- **Odor threshold**
  Not available.
- **pH**
  9.2
- **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**
  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**
  Not available.
- **Other information**
  For other VOC regulatory data/information see Section 15.
- **VOC (Weight %)**
  < 289 g/l VOC Method 24/ASTM D403-93

### 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

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.

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
Based on available data, the classification criteria are not met.
Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA. Carbon black is present only in a bound form in this preparation.

IARC Monographs. Overall Evaluation of Carcinogenicity
Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

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.

Components
Species
Test Results

2-pyrrolidone (CAS 616-45-5)

Acute
Oral
LD50
Guinea pig
6500 mg/kg
Rat
6500 mg/kg

Carbon black (CAS 1333-86-4)

Acute
Oral
LD50
Rat
> 8000 mg/kg
12. Ecological information

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></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</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

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions
Do not dispose of together with general office waste. Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Ensure collection and disposal with an appropriately licensed waste contractor.

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 listed.

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
Safe Drinking Water Act (SDWA) Not regulated.
US state regulations

**US. Massachusetts RTK - Substance List**
- 2-pyrrolidone (CAS 616-45-5)
- Carbon black (CAS 1333-86-4)

**US. New Jersey Worker and Community Right-to-Know Act**
- Carbon black (CAS 1333-86-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**
- 2-pyrrolidone (CAS 616-45-5)
- Carbon black (CAS 1333-86-4)

**US. Rhode Island RTK**
- Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**
- CARBON BLACK (AIRBORNE, UNBOUND PARTICLES \[<= 10 MICROMETERS\]) (CAS 1333-86-4)
  Listed: February 21, 2003

**Other information**
- VOC content (less water, less exempt compounds) = <926 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**
- 11-Sep-2016

**Revision date**
- 09-Nov-2016

**Version #**
- 06

**Disclaimer**
- 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.

**Manufacturer information**
- HP Inc.
  1501 Page Mill Road
  Palo Alto, CA 94304-1112 US
  Direct 1-650-857-5020
### 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>