1. Identification

Product identifier: 5184-6621
Other means of identification: Not available.
Recommended use: Inkjet printing. For use only in inkjet printing
Recommended restrictions: None known.
Company identification: HP
1501 Page Mill Road
Palo Alto, CA 94304-1112
United States
Telephone 650-857-5020

HP health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
HP 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)**

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. 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. Complete toxicity data are not available for this specific formulation.

**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>60-70</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;20</td>
</tr>
<tr>
<td>Substituted diol</td>
<td></td>
<td>Proprietary</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

Material name: 5184-6621
Carbon black is present only in a bound form in this preparation.

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

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<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></td>
<td>3.5 mg/m3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values Components</th>
<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></td>
<td>3 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
<tr>
<td>Components</td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA 0.1 mg/m3</td>
<td></td>
<td></td>
<td></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**
Not available.

**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

**Melting point/freezing point**
Not available.

**Initial boiling point and boiling range**
Not available.

**Flash point**
200.0 °F (93.3 °C) Pensky-Martens Closed Cup

**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 %)**
256 g/l (Determined by EPA Method 24)

### 10. Stability and reactivity

**Reactivity**
Not available.
Chemical stability  Stable under recommended storage conditions.
Possibility of hazardous reactions  None known.
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, fluorinated hydrocarbons and hydrogen fluoride.

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  Based on available data, the classification criteria are not met.
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. 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. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

<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></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 8000 mg/kg</td>
</tr>
<tr>
<td>Substituted diol (CAS Proprietary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>
### 12. Ecological information

**Ecotoxicity**

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>5184-6621 (CAS Mixture)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td><strong>LC50</strong></td>
</tr>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td><strong>EC50</strong></td>
</tr>
</tbody>
</table>

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</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](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.

### 15. Regulatory information

**US federal regulations**

US TSCA 12(b): Does not contain listed chemicals.

US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under 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.


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 OF RESPIRABLE SIZE [<= 10 MICROMETERS]) (CAS 1333-86-4)
  - Listed: February 21, 2003

Other information
- VOC content (less water, less exempt compounds) = 807 g/L (U.S. requirement, not for emissions)
- VOC data based on formulation (Organic compounds minus solids)
- US EPA Method 24

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: 28-Jun-2015
Revision date: 19-Nov-2015
Version #: 02

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
  - 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>