1. Identification

Product identifier: F9K21Series

Other means of identification: Not available.

Recommended use: Inkjet 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: Specific target organ toxicity, repeated exposure (oral) Category 2 (kidney)

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:

Signal word: Warning

Hazard statement: May cause damage to organs (Kidney) through prolonged or repeated exposure.

Precautionary statement:

Prevention: P270 - Do not eat, drink or smoke when using this product.

Response: P314 - Get medical attention/advice if you feel unwell.

Storage: Not available.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): 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: None.

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>75-85</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td>56-81-5</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Alkyldiol</td>
<td></td>
<td>Proprietary</td>
<td>&lt;5</td>
</tr>
</tbody>
</table>
### Chemical name and synonyms

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol</td>
<td></td>
<td>111-46-6</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Carbon black</td>
<td></td>
<td>1333-86-4</td>
<td>&lt;1</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

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

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<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>PEL</td>
<td>3.5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Glycerol (CAS 56-81-5)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<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>

### US. Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol (CAS 111-46-6)</td>
<td>TWA</td>
<td>10 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**: Not available.
- **Color**: Grey, Dark Grey, Black.
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: 9.4
- **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 determined
- **Flammability limit - upper (%)**: Not available.
- **Explosive limit - lower (%)**: Not available.
- **Explosive limit - upper (%)**: Not available.

#### Vapor pressure
- Not determined

#### Solubility(ies)
- **Solubility (water)**: Soluble in water

#### Partition coefficient (n-octanol/water)
- Not available.

#### Auto-ignition temperature
- Not determined

#### Decomposition temperature
- Not available.

#### Viscosity
- Not available.

#### Other information
- For other VOC regulatory data/information see Section 15.
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.

**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**  May cause damage to organs (Kidney) through prolonged or repeated exposure.

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

**Further information**  Complete toxicity data are not available for this specific formulation.

<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><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></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><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 8000 mg/kg</td>
</tr>
<tr>
<td>Diethylene glycol (CAS 111-46-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>11890 mg/kg</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Cat</td>
<td>3300 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Dog</td>
<td>9000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Guinea pig</td>
<td>8700 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>13.3 g/kg</td>
</tr>
</tbody>
</table>
### 12. Ecological information

#### Ecotoxicity

**Product**
- **F9K21Series**
  - **Aquatic**
    - **Acute**
      - **Fish**
        - **LC50**
          - Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours

**Components**
- **2-pyrrolidone (CAS 616-45-5)**
  - **Aquatic**
    - **Crustacea**
      - **EC50**
        - Water flea (Daphnia pulex) 13.21 mg/l, 48 hours

- **Diethylene glycol (CAS 111-46-6)**
  - **Aquatic**
    - **Fish**
      - **LC50**
        - Western mosquitofish (Gambusia affinis) > 32000 mg/l, 96 hours

- **Glycerol (CAS 56-81-5)**
  - **Aquatic**
    - **Fish**
      - **LC50**
        - Rainbow trout, donaldson trout (Oncorhynchus mykiss) 51000 - 57000 mg/l, 96 hours

#### Persistence and degradability
- Not available.

#### Bioaccumulative potential
- Not available.

#### Partition coefficient n-octanol / water (log Kow)
- **2-pyrrolidone**: -0.85
- **Glycerol**: -1.76

#### 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.

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 - Yes
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)
Glycerol (CAS 56-81-5)

US, New Jersey Worker and Community Right-to-Know Act
Glycerol (CAS 56-81-5)

US, Pennsylvania Worker and Community Right-to-Know Law
2-pyrrolidone (CAS 616-45-5)
Diethylene glycol (CAS 111-46-6)
Glycerol (CAS 56-81-5)

US, Rhode Island RTK
Not regulated.

US, California Proposition 65
Not Listed.

Other information
VOC content (less water, less exempt compounds) = <451.6 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 21-Jan-2016
Revision date 20-Aug-2016
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 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>