SAFETY DATA SHEET

1. Identification

Product identifier: F9K29Series
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>Alkyldiol</td>
<td>Proprietary</td>
<td></td>
<td>&lt;5</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td>56-81-5</td>
<td>&lt;5</td>
</tr>
</tbody>
</table>

Material name: F9K29Series
10076  Version #: 03  Revision date: 27-Jul-2016  Issue date: 21-Jan-2016
## CAS number

<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;2.5</td>
</tr>
<tr>
<td>Trade secret colorant</td>
<td></td>
<td>Proprietary</td>
<td>&lt;2.5</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).

## 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. If irritation persists get medical attention.

### 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 material is ingested, immediately contact a physician or poison control center.

### Most important symptoms/effects, acute and delayed

Not available.

## 5. Fire-fighting measures

### Suitable extinguishing media

CO2, water, dry chemical, or 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

Not available.

### 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>Glycerol (CAS 56-81-5)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>Total dust.</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 Blue
Odor Not available.
Odor threshold Not available.
pH 9.2
Melting point/freezing point Not available.
Initial boiling point and boiling range Not determined
Flash point > 230.0 °F (> 110.0 °C) Setaflash 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.
VOC (Weight %) 136.8 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, aldehydes, ketones, hydrogen fluoride, fluorinated hydrocarbons.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

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

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>Acute Oral</td>
<td>Guinea pig</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>LD50 Rat</td>
<td>6500 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Diethylene glycol (CAS 111-46-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Dermal</td>
<td>Rabbit</td>
<td>11890 mg/kg</td>
</tr>
<tr>
<td>LD50 Cat</td>
<td>3300 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Oral Dog</td>
<td>9000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Guinea pig</td>
<td>8700 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Mouse</td>
<td>13.3 g/kg</td>
<td></td>
</tr>
<tr>
<td>Rabbit</td>
<td>26.9 g/kg</td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td>12565 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Other Mouse</td>
<td>9.6 g/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 Rabbit</td>
<td>2000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 Rat</td>
<td>7700 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.7 g/kg</td>
<td></td>
</tr>
</tbody>
</table>

12. Ecological information

Aquatic toxicity

Not expected to be harmful to aquatic organisms.
Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>F9K29Series</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) &gt; 750 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>2-pyrrolidone (CAS 616-45-5)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia pulex) 13.21 mg/l, 48 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diethylene glycol (CAS 111-46-6)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Western mosquitofish (Gambusia affinis) &gt; 32000 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Glycerol (CAS 56-81-5)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout,donaldson trout (Oncorhynchus mykiss) 51000 - 57000 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

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.

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 - 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) = 676 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 27-Jul-2016
Version # 03

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>