1. Identification

Product identifier: C9445 Series
Other means of identification: Not available.
Recommended use: 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)
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>70-80</td>
</tr>
<tr>
<td>Diethylene glycol</td>
<td></td>
<td>111-46-6</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;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>
<tr>
<td>Trade secret green colorant</td>
<td></td>
<td>Proprietary</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

Material name: C9445 Series
Version #: 02 Revision date: 14-Sep-2015 Issue date: 12-Mar-2015
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

<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>

<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.
9. Physical and chemical properties

Appearance
- Physical state: Not available.
- Color: Green

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 %)
- 169.3 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

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.

- **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.

### Components

<table>
<thead>
<tr>
<th>Component</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>Oral</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><strong>Diethylene glycol (CAS 111-46-6)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>11890 mg/kg</td>
</tr>
<tr>
<td>Oral</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>
<tr>
<td></td>
<td>Rabbit</td>
<td>26.9 g/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>12565 mg/kg</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Mouse</td>
<td>9.6 g/kg</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>7700 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.7 g/kg</td>
</tr>
</tbody>
</table>
12. Ecological information

Ecotoxicity

Product      | Species               | Test Results                   |
-------------|-----------------------|--------------------------------|
C9445 Series (CAS Mixture)  |                       |
   Aquatic    |                       |                                |
      Acute   |                       |                                |
      Fish     | LC50                  | Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours |

Components

Species | Test Results                   |
---------|--------------------------------|
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)**

<table>
<thead>
<tr>
<th>Compound</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone</td>
<td>-0.85</td>
</tr>
<tr>
<td>Glycerol</td>
<td>-1.76</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.

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)
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) = 820.1 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 12-Mar-2015
Revision date 14-Sep-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.

Revision Information
Hazard(s) identification: Hazard(s) not otherwise classified (HNOC)
Hazard(s) identification: Supplemental information
Other information, including date of preparation or last revision: Disclaimer

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

Material name: C9445 Series
10075 Version #: 02 Revision date: 14-Sep-2015 Issue date: 12-Mar-2015
Explanation of abbreviations

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