SAFETY DATA SHEET

1. Identification

Product identifier: C4805Series
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>1,5-pentanediol</td>
<td></td>
<td>111-29-5</td>
<td>&lt;15</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Alkyldicarboxylic acid</td>
<td></td>
<td>Proprietary</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Substituted xanthylum salt #1</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

<table>
<thead>
<tr>
<th>Condition</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Remove to fresh air. If symptoms persist, get medical attention.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>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.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>If ingestion of a large amount does occur, seek medical attention.</td>
</tr>
<tr>
<td>Most important symptoms/effects, acute and delayed</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

5. Fire-fighting measures

<table>
<thead>
<tr>
<th>Type</th>
<th>Suitable extinguishing media</th>
<th>Unsuitable extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable extinguishing media</td>
<td>Dry chemical, CO2, water spray or regular foam.</td>
<td>None known.</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
<td>None known.</td>
<td></td>
</tr>
</tbody>
</table>

6. Accidental release measures

<table>
<thead>
<tr>
<th>Type</th>
<th>Methods and materials for containment and cleaning up</th>
<th>Environmental precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal precautions, protective equipment and emergency procedures</td>
<td>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.</td>
<td>Do not let product enter drains. Do not flush into surface water or sanitary sewer system.</td>
</tr>
</tbody>
</table>

7. Handling and storage

<table>
<thead>
<tr>
<th>Type</th>
<th>Precautions for safe handling</th>
<th>Conditions for safe storage, including any incompatibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions for safe handling</td>
<td>Avoid contact with skin, eyes and clothing.</td>
<td>Keep out of the reach of children. Keep away from excessive heat or cold.</td>
</tr>
</tbody>
</table>

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Type</th>
<th>Occupational exposure limits</th>
<th>Biological limit values</th>
<th>Exposure guidelines</th>
<th>Appropriate engineering controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational exposure limits</td>
<td>No exposure limits noted for ingredient(s).</td>
<td>No biological exposure limits noted for the ingredient(s).</td>
<td>Exposure limits have not been established for this product.</td>
<td>Use in a well ventilated area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Individual protection measures, such as personal protective equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye/face protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Skin protection</td>
<td></td>
</tr>
<tr>
<td>Hand protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Thermal hazards</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>General hygiene considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>General hygiene considerations</td>
<td>Handle in accordance with good industrial hygiene and safety practice.</td>
</tr>
</tbody>
</table>

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Type</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid.</td>
</tr>
<tr>
<td>Color</td>
<td>Magenta</td>
</tr>
</tbody>
</table>
Odor: Not available.

Odor threshold: Not available.

pH: 3.8 - 4.2

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 available.

Decomposition temperature: Not available.

Viscosity: >= 2 cp

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

VOC (Weight %): < 140 g/l estimated

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
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><strong>Acute</strong></td>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>6500 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Alkyldicarboxylic acid (CAS Proprietary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2260 mg/kg</td>
</tr>
<tr>
<td>&lt;= 10000 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Ecological information

Aquatic toxicity
Static acute toxicity (trout), survival (100 mg/L) = 100%
Static acute toxicity (trout), survival (10 mg/L) = 100%

<table>
<thead>
<tr>
<th>Ecotoxicity Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4805Series (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td>Fathead minnow (Pimephales promelas)</td>
<td>&lt; 400 mg/l, 96 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>Water flea (Daphnia pulex)</td>
<td>13.21 mg/l, 48 hours</td>
</tr>
<tr>
<td>Alkyldicarboxylic acid (CAS Proprietary)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>Water flea (Daphnia magna)</td>
<td>350 - 400 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>101, 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 |
Alkyldicarboxylic acid | -0.59 |

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)

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
2-pyrrolidone (CAS 616-45-5)

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
Not Listed.

Other information
VOC content (less water, less exempt compounds) = <492 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
09-Mar-2015

Revision date
20-Aug-2015
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)
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

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