1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>51600C Rev B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>None.</td>
</tr>
<tr>
<td>Recommended use</td>
<td>Inkjet printing</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>None known.</td>
</tr>
</tbody>
</table>

**Manufacturer/Importer/Supplier/Distributor information**

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**
- Sensitization, skin Category 1
- Specific target organ toxicity, repeated exposure Category 2

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Warning

**Hazard statement** May cause an allergic skin reaction. May cause damage to organs (Kidney) through prolonged or repeated exposure.

**Precautionary statement**

**Prevention** Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray.

**Response** IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Get medical attention/advice if you feel unwell. Wash contaminated clothing before reuse.

**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.

Contains Food Black 2 acid salt.
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>30-40</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt;30</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td></td>
<td>107-21-1</td>
<td>&lt;25</td>
</tr>
<tr>
<td>Alkyldiol*</td>
<td>Proprietary*</td>
<td>&lt;7.5</td>
<td></td>
</tr>
<tr>
<td>Food Black 2 Acid Salt*</td>
<td>Proprietary*</td>
<td>&lt;5</td>
<td></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

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
None known.

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
This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.

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>Ethylene glycol (CAS 107-21-1)</td>
<td>Ceiling</td>
<td>100 mg/m3</td>
<td>Aerosol.</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

<table>
<thead>
<tr>
<th>Protection</th>
<th>Measures</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>Recommended gloves: Nitrile 4 mil minimum thickness.</td>
</tr>
<tr>
<td>Other</td>
<td>Not available.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Not available.</td>
</tr>
<tr>
<td>Thermal hazards</td>
<td>Not available.</td>
</tr>
<tr>
<td>General hygiene</td>
<td>Handle in accordance with good industrial hygiene and safety practice.</td>
</tr>
</tbody>
</table>

9. Physical and chemical properties

**Appearance**
- **Physical state**: Liquid.
- **Form**: Not available.
- **Color**: Black.

**Odor**
- Not available.

**Odor threshold**
- Not available.

**pH**
- 7 - 7.4

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

**Initial boiling point and boiling range**
- Not determined

**Flash point**
- > 200.0 °F (> 93.3 °C) Closed Cup EPA Method 1020

**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 available.

**Vapor density**
- Not available.

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

**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: < 578 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

Information on likely routes of exposure

**Inhalation**
Inhalation may result in mild irritation to the respiratory system.

**Skin contact**
May cause sensitization by skin contact.

**Eye contact**
Contact with eyes may result in mild irritation.

**Ingestion**
Ingestion is not a likely route of exposure.

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.
LD50/oral/rat >2500 mg/kg (OECD 401).

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
</table>
| 2-pyrollidone (CAS 616-45-5) | Acute | Oral LD50 Rat
| Ethylene glycol (CAS 107-21-1) | Acute Dermal LD50 Rabbit | 9530 mg/kg |
| | Inhalation Aerosol LC50 Rat | > 2.5 mg/l, 6 Hours |
| | Other LD50 Rat | 2800 mg/kg |

**Skin corrosion/irritation**
Based on available data, the classification criteria are not met.
Non irritant in rabbit (OECD 404)

**Serious eye damage/eye irritation**
Based on available data, the classification criteria are not met.
Not classified as an irritant according to, OECD 405.

**Respiratory or skin sensitization**

- **Respiratory sensitization**
  Based on available data, the classification criteria are not met.

- **Skin sensitization**
  May cause sensitization by skin contact.

- **Germ cell mutagenicity**
  Based on available data, the classification criteria are not met.

- **Carcinogenicity**
  Based on available data, the classification criteria are not met.

  IARC Monographs. Overall Evaluation of Carcinogenicity
  Not listed.

  OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
  Not regulated.

  US. National Toxicology Program (NTP) Report on Carcinogens
  Not listed.

**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 by ingestion.

**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.
12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>51600C Rev B</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></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 Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</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>
<tr>
<td>Ethylene glycol</td>
<td>-1.36</td>
</tr>
</tbody>
</table>

Mobility in soil

Not available.

Other adverse effects

Not available.

13. Disposal considerations

Disposal instructions

Do not dispose of together with general office waste. Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Ensure collection and disposal with an appropriately licensed waste contractor.

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)

Ethylene glycol (CAS 107-21-1) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
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
- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  Ethylene glycol (CAS 107-21-1)
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  Not regulated.
- Safe Drinking Water Act (SDWA)
  Not regulated.

US state regulations
- US - California Proposition 65 - CRT: Listed date/Developmental toxin
  ETHYLENE GLYCOL (INGESTED) (CAS 107-21-1) Listed: June 19, 2015
  US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
  Ethylene glycol (CAS 107-21-1)

Other information
- VOC content (less water, less exempt compounds) = < 982 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-May-2015
- Revision date: 01-Jan-2019
- Version #: 03
- Other information: This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

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.

- This safety data sheet is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs.

Revision information
- Hazard(s) identification: Prevention
- Hazard(s) identification: Response
- 3. Composition / Information on Ingredients: Disclosure Overrides
- Physical & Chemical Properties: Multiple Properties
- Toxicological information: Acute toxicity
- Toxicological information: Corrosivity
- Toxicological information: Eye contact
- Toxicological information: Inhalation
- Toxicological information: Skin contact
- Regulatory information: Regulatory information
- Other information, including date of preparation or last revision: Disclaimer
- GHS: Classification
### 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>