1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>51600D 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: 650-857-1501

**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

<table>
<thead>
<tr>
<th>Physical hazards</th>
<th>Not classified.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazards</td>
<td></td>
</tr>
<tr>
<td>Sensitization, skin</td>
<td>Category 1</td>
</tr>
<tr>
<td>Reproductive toxicity (fertility, the unborn child)</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Specific target organ toxicity, repeated exposure</td>
<td>Category 2 (kidney)</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Not classified.</td>
</tr>
<tr>
<td>OSHA defined hazards</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

**Label elements**

- **Signal word**: Danger
- **Hazard statement**: May cause an allergic skin reaction. May cause damage to organs (kidney) through prolonged or repeated exposure. May damage fertility or the unborn child.
- **Precautionary statement**
  - **Prevention**: Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not breathe mist or vapor.
  - **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. IF exposed or concerned: Get medical advice/attention. 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.

Supplemental information
2-pyrrolidone: OSHA Hazard Communication Standard cut-off value, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

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></td>
<td>Proprietary</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Food Black 2 acid salt # 3</td>
<td></td>
<td>Proprietary</td>
<td>&lt;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).

2-pyrrolidone: OSHA Hazard Communication Standard cut-off value 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

*Proprietary

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.
8. Exposure controls/personal protection

Occupational exposure limits

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

Eye/face protection
Not available.

Skin protection

Hand protection
Recommended gloves: Nitrile 4 mil minimum thickness.

Other
Use personal protective equipment to minimize exposure to skin and eye.

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
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

Percent volatile 25 % estimated

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).

Components Species Test Results

2-pyrrolidone (CAS 616-45-5)

Acute

Oral

LD50 Rat > 5000 mg/kg

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 1910.1001-1053)

Not listed.
Reproductive toxicity
May damage fertility or the unborn child.

2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).

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>51600D Rev B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</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>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</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>

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

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
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</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Class</td>
<td>Not available.</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not available.</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

IATA

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>Not available.</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>
Transport hazard class(es)
Class Not available.
Subsidiary risk -
Packing group Not available.
Environmental hazards No
Special precautions for user Not available.

IMDG
UN number Not available.
UN proper shipping name Not Regulated
Transport hazard class(es)
Class Not available.
Subsidiary risk -
Packing group Not available.
Transport hazard class(es)
Marine pollutant No
EmS Not available.
Special precautions for user Not available.

ADR
UN number Not available.
UN proper shipping name Not Regulated
Transport hazard class(es)
Class Not available.
Subsidiary risk -
Hazard No. (ADR) Not available.
Tunnel restriction code Not available.
Packing group Not available.
Environmental hazards No
Special precautions for user Not available.

Further information Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

15. Regulatory information

US federal regulations
Toxic Substances Control Act (TSCA)
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 1910.1001-1053)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes
Classified hazard categories Respiratory or skin sensitization Reproductive toxicity Specific target organ toxicity (single or repeated exposure)

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

California Proposition 65

California Proposition 65 - CRT: Listed date/Developmental toxin

Ethylene glycol (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 26-May-2015
Revision date 01-Jun-2020
Version # 05
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.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</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>