1. Identification

Product identifier: F0L63Series

Other means of identification:

Synonyms: HP 2580 Black Solvent Ink

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: Flammable liquids Category 2

Health hazards: Serious eye damage/eye irritation Category 1

Environmental hazards: Hazardous to the aquatic environment, long-term hazard Category 3

OSHA defined hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: Highly flammable liquid and vapor. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention:
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P273 - Avoid release to the environment.

Response:
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370 + P378 - In case of fire: Use sand, carbon dioxide (CO2) or dry chemical to extinguish.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.

Storage:
P403 + P235 - Store in a well-ventilated place. Keep cool.

Disposal:
Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)  
Prolonged or repeated skin contact may cause drying, cracking, or irritation. May produce an allergic reaction.

Supplemental information  
Contains tinting agent. May produce an allergic reaction.

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>ethanol</td>
<td></td>
<td>64-17-5</td>
<td>&lt;80</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td></td>
<td>108-94-1</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Acetone</td>
<td></td>
<td>67-64-1</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Black colorant</td>
<td></td>
<td>Proprietary</td>
<td>&lt;7.5</td>
</tr>
<tr>
<td>Amines, C12-18-alkyl, bis[2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H pyrazol-3-onato(2-)]cobaltate</td>
<td>85203-44-7</td>
<td>&lt;1</td>
<td></td>
</tr>
<tr>
<td>Sodium bis[2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H -pyrazol-3-onato(2-)]cobaltate</td>
<td>71839-88-8</td>
<td>&lt;1</td>
<td></td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation  
Move person to fresh air immediately.  
If symptoms persist, get immediate medical attention.

Skin contact  
In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Wash clothing separately before reuse.  
Get medical attention, if needed.

Eye contact  
In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Get medical attention immediately.

Ingestion  
Rinse mouth out with water. If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Never give anything by mouth to an unconscious person.  
Get medical attention immediately.

Most important symptoms/effects, acute and delayed  
Not available.

5. Fire-fighting measures

Suitable extinguishing media  
Suitable extinguishing media: sand, carbon dioxide (CO2) or dry chemical.

Unsuitable extinguishing media  
Not available.

Specific hazards arising from the chemical  
Not applicable.

Special protective equipment and precautions for firefighters  
Firefighters should wear full protective clothing including self contained breathing apparatus. Avoid runoff into storm sewers and ditches which lead to waterways.

Fire-fighting equipment/instructions  
Move containers from fire area if you can do it without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures  
Avoid contact with skin. Avoid inhalation of vapors or mists.  
Do not touch or walk through spilled material. Ensure adequate ventilation. Remove all sources of ignition.  
Use personal protective equipment to minimize exposure to skin and eye. In the case of vapor formation use a respirator with an approved filter.

Methods and materials for containment and cleaning up  
Not available.

Environmental precautions  
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. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>PEL</td>
<td>2400 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>PEL</td>
<td>200 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 ppm</td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>PEL</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>STEL</td>
<td>750 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>STEL</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>TWA</td>
<td>590 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 ppm</td>
</tr>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>TWA</td>
<td>100 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 ppm</td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>50 mg/l</td>
<td>Acetone</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>80 mg/l</td>
<td>1,2-Cyclohexanediol, with hydrolysis</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>8 mg/l</td>
<td>Cyclohexanol, with hydrolysis</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

US. ACGIH Threshold Limit Values
Cyclohexanone (CAS 108-94-1) Can be absorbed through the skin.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants
CYCLOHEXANONE (CAS 108-94-1) Can be absorbed through the skin.

US. Minnesota Hazardous Substances List (Minn. Rules 5206.0400).
Cyclohexanone (CAS 108-94-1) Skin designation applies.

US. NIOSH: Pocket Guide to Chemical Hazards
Cyclohexanone (CAS 108-94-1) Can be absorbed through the skin.
US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A
Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

Appropriate engineering controls
Not available.

Individual protection measures, such as personal protective equipment

**Eye/face protection**
Wear safety glasses; chemical goggles (if splashing is possible).
Eye wash fountain and emergency showers are recommended.

**Skin protection**

**Hand protection**
Wear appropriate chemical resistant gloves.

**Other**
Wear appropriate chemical resistant clothing.

**Respiratory protection**
Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

**Thermal hazards**
Not available.

**General hygiene considerations**
Do not get this material in contact with skin. Avoid contact with skin, eyes and clothing.
When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
Launder contaminated clothing before reuse.

### 9. Physical and chemical properties

**Appearance**

**Physical state**
Not available.

**Color**
Black.

**Odor**
Solvent.

**Odor threshold**
Not available.

**pH**
Not available.

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

**Initial boiling point and boiling range**
Not available.

**Flash point**
41.0 °F (5.0 °C) Setaflash Closed Cup

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)**
Not available.

**Flammability limit - upper (%)**
Not available.

**Explosive limit - lower (%)**
Not available.

**Explosive limit - upper (%)**
Not available.

**Vapor pressure**
Not available.

**Solubility(ies)**

**Solubility (water)**
Not available.

**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 (Weight %)**
789 g/l

### 10. Stability and reactivity

**Reactivity**
Not available.

**Chemical stability**
Stable at normal conditions.
Possibility of hazardous reactions
None known.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Not available.

Hazardous decomposition products
Not available.

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
Causes serious eye damage.

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.

IARC Monographs. Overall Evaluation of Carcinogenicity
Cyclohexanone (CAS 108-94-1) 3 Not classifiable as to carcinogenicity to humans.

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.

Components

<table>
<thead>
<tr>
<th>Acetone (CAS 67-64-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute</strong></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
</tr>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Rabbit</td>
</tr>
<tr>
<td>20000 mg/kg</td>
</tr>
<tr>
<td>20 ml/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>76 mg/l, 4 Hours</td>
</tr>
<tr>
<td>50.1 mg/l, 8 Hours</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Mouse</td>
</tr>
<tr>
<td>3000 mg/kg</td>
</tr>
<tr>
<td>Rabbit</td>
</tr>
<tr>
<td>5340 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>5800 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50</td>
</tr>
<tr>
<td>Mouse</td>
</tr>
<tr>
<td>1297 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td>5500 mg/kg</td>
</tr>
</tbody>
</table>

ethanol (CAS 64-17-5)

<table>
<thead>
<tr>
<th>Acute</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
</tr>
<tr>
<td>LC50</td>
</tr>
<tr>
<td>Mouse</td>
</tr>
<tr>
<td>39 mg/l, 4 Hours</td>
</tr>
</tbody>
</table>
### Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rat</td>
<td>20000 ppm, 10 Hours</td>
</tr>
<tr>
<td>Dog</td>
<td>5.5 g/kg</td>
</tr>
<tr>
<td>Guinea pig</td>
<td>5.6 g/kg</td>
</tr>
<tr>
<td>Mouse</td>
<td>3450 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>6.2 g/kg</td>
</tr>
<tr>
<td>Mouse</td>
<td>933 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>1440 mg/kg</td>
</tr>
</tbody>
</table>

### LD50

- **Dog** Oral 5.5 g/kg
- **Guinea pig** 5.6 g/kg
- **Mouse** 3450 mg/kg
- **Rat** 6.2 g/kg

### Ecological information

#### Aquatic toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

\[ LC50/96h/rainbow trout = \leq 100 \text{ mg/l and } >10 \text{ mg/l.} \]

#### Ecotoxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Water flea (Daphnia magna)</td>
<td>21.6 - 23.9 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
<td>4740 - 6330 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

| Cyclohexanone (CAS 108-94-1) | **Aquatic** | |
| Fish | LC50 Fathead minnow (Pimephales promelas) | 481 - 578 mg/l, 96 hours |

| Ethanol (CAS 64-17-5) | **Aquatic** | |
| Crustacea | EC50 Water flea (Daphnia magna) | 7.7 - 11.2 mg/l, 48 hours |
| Fish | LC50 Fathead minnow (Pimephales promelas) | > 100 mg/l, 96 hours |

#### Persistence and degradability

Not available.

#### Bioaccumulative potential

Not available.

#### Partition coefficient n-octanol / water (log Kow)

- Acetone: -0.24
- Cyclohexanone: 0.81
- Ethanol: -0.31

#### Mobility in soil

Not available.

#### Other adverse effects

Not available.

### 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.

### Transport information

**DOT**

- **UN number**: UN1210
- **UN proper shipping name**: Printing ink, flammable (Ethanol, Acetone)
- **Transport hazard class(es)**
  - **Class**: 3
  - **Subsidiary risk**: -
  - **Packaging group**: II
Not available.

DOT Supplemental Information: DOT Classification only applies to shipments within the US and Puerto Rico.

IATA
- UN number: UN1210
- UN proper shipping name: Printing ink, flammable (Ethanol, Acetone)
- Transport hazard class(es):
  - Class: 3
  - Subsidiary risk: -
  - Packing group: II
  - Environmental hazards: No.
- Special precautions for user: Not available.

IMDG
- UN number: UN1210
- UN proper shipping name: Printing ink, flammable (Ethanol, Acetone)
- Transport hazard class(es):
  - Class: 3
  - Subsidiary risk: -
  - Packing group: II
  - Marine pollutant: No.
  - EmS: Not available.
- Special precautions for user: Not available.

ADR
- Proper shipping name: Printing ink, flammable (Ethanol, Acetone)
- Hazard class: 3
- UN number: UN1210
- Packing group: II

DOT

IATA; IMDG

Material name: FOL63Series
Version #: 03 Revision date: 06-Sep-2015 Issue date: 26-May-2015
15. Regulatory information

US federal regulations

US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
- Acetone (CAS 67-64-1) Listed.
- Cyclohexanone (CAS 108-94-1) 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 - Yes
- Delayed Hazard - No
- Fire Hazard - Yes
- 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.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
- Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
- Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number
- Acetone (CAS 67-64-1) 6532

US state regulations

US. Massachusetts RTK - Substance List
- Acetone (CAS 67-64-1)
- Cyclohexanone (CAS 108-94-1)
- ethanol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act
- Acetone (CAS 67-64-1)
- Cyclohexanone (CAS 108-94-1)
- ethanol (CAS 64-17-5)

US. Pennsylvania Worker and Community Right-to-Know Law
- Acetone (CAS 67-64-1)
- Cyclohexanone (CAS 108-94-1)
- ethanol (CAS 64-17-5)
US. Rhode Island RTK
Acetone (CAS 67-64-1)
Cyclohexanone (CAS 108-94-1)

US. California Proposition 65
Not Listed.

Other information
VOC content (less water, less exempt compounds) = 789 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 06-Sep-2015
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.

Revision Information
Other information, including date of preparation or last revision: Disclaimer

Manufacturer information
HP Inc
1000 Circle Blvd.
Corvallis, OR 97330 US
Chemist : +1 541 715 4804
Toxicologist: +1 360 212 3288

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