1. Identification

Important information
*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***

Product identifier
F0L91Series

Other means of identification
Synonyms
HP 2580 Black Solvent Ink

Recommended use
Inkjet printing

Recommended restrictions
None known.

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

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

Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. In case of fire: Use CO2 to extinguish.

Storage
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.

GHS Supplemental information
None.

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>Ethyl Alcohol</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>C.I. Solvent Orange 11</td>
<td></td>
<td>61725-76-6</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Naphthalene</td>
<td></td>
<td>91-20-3</td>
<td>&lt;0.1</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
None known.

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

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<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>Ethyl Alcohol (CAS 64-17-5)</td>
<td>PEL</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td>PEL</td>
<td>50 mg/m³</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>500 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>250 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>Ethyl Alcohol (CAS 64-17-5)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td>STEL</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>10 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>Ethyl Alcohol (CAS 64-17-5)</td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td>TWA</td>
<td>75 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

**Biological limit values**

**ACGIH Biological Exposure Indices**

<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>25 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.

Naphthalene (CAS 91-20-3) 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.

NAPHTHALENE (CAS 91-20-3) 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).

Skin protection
Hand protection
Recommended gloves: Nitrile 6 mil minimum thickness.

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.

Form
Liquid.

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) Setash flash 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.

Vapor density
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.

Percent volatile
0.01 % estimated

VOC
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

Information on likely routes of exposure

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

Skin contact
Contact with skin may result in mild irritation.

Eye contact
Causes serious eye damage.

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.

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td></td>
</tr>
<tr>
<td>Acute Dermal</td>
<td></td>
</tr>
<tr>
<td>LD50 Rabbit</td>
<td>&gt; 2 g/kg</td>
</tr>
<tr>
<td>LD50 Rat</td>
<td>&gt; 20 g/kg</td>
</tr>
<tr>
<td>Acute Oral</td>
<td></td>
</tr>
<tr>
<td>LD50 Guinea pig</td>
<td>1200 mg/kg</td>
</tr>
<tr>
<td>LD50 Rat</td>
<td>490 mg/kg</td>
</tr>
<tr>
<td>Acute Other</td>
<td></td>
</tr>
<tr>
<td>LD50 Mouse</td>
<td>100 mg/kg</td>
</tr>
</tbody>
</table>

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

IARC Monographs. Overall Evaluation of Carcinogenicity
Cylohexanone (CAS 108-94-1) 3 Not classifiable as to carcinogenicity to humans.
Naphthalene (CAS 91-20-3) 2B Possibly carcinogenic to humans.

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

US. National Toxicology Program (NTP) Report on Carcinogens
Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

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.
12. Ecological information

Aquatic toxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
LC50/96h/rainbow trout =<100 mg/l and >10 mg/l.

Ecotoxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia 9268, 48 Hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish 12900, 96 Hours</td>
</tr>
<tr>
<td>Naphthalene (CAS 91-20-3)</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 magna) 1.09 - 3.4 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Pink salmon (Oncorhynchus gorbuscha) 1.11 - 1.68 mg/l, 96 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>Log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>-0.24</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>0.81</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td>-0.31</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>3.3</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

| UN number  | UN1210 |
| UN proper shipping name | Printing ink |
| Transport hazard class(es) | 3 |
| Class | 3 |
| Subsidiary risk | - |
| Packing group | II |
| Special precautions for user | 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 |
| Transport hazard class(es) | 3 |
| 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 |
| Transport hazard class(es) | 3 |
| Class | 3 |
| Subsidiary risk | - |
| Packing group | II |
Transport hazard class(es)
  Marine pollutant No.
EmS Not available.
Special precautions for user Not available.
ADR
  UN number UN1210
  UN proper shipping name Printing ink
Transport hazard class(es)
  Class 3
  Subsidiary risk -
  Hazard No. (ADR) Not available.
  Tunnel restriction code Not available.
Packing group II
Environmental hazards No.
Special precautions for user Not available.

ADR; IATA; IMDG

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.
  Naphthalene (CAS 91-20-3) 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 - 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

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Naphthalene (CAS 91-20-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

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

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Acetone (CAS 67-64-1) Low priority
Cyclohexanone (CAS 108-94-1) Low priority
Ethyl Alcohol (CAS 64-17-5) Low priority

US state regulations

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
NAPHTHALENE (CAS 91-20-3) Listed: April 19, 2002

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
Acetone (CAS 67-64-1)
Naphthalene (CAS 91-20-3)

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)

Other information

14. Transport Information: Material Transportation Information
FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Regulatory information

This chemical substance has been notified or is 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: 18-Jul-2017
Revision date: 19-Sep-2019
Version #: 02

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.

Revision information

Identification: Important information
Composition / Information on Ingredients: Ingredients
14. Transport Information: Material Transportation Information
Regulatory information: Regulatory information
### 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>