SAFETY DATA SHEET

1. Identification

Product identifier: W3S80Series

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: 650-857-5020

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: 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:
- 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.
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>C.I. Solvent Black 29</td>
<td></td>
<td>61901-87-9</td>
<td>&lt;5</td>
</tr>
<tr>
<td>C.I. Solvent Orange 11</td>
<td></td>
<td>61725-76-6</td>
<td>&lt;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
This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
### 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>ethanol (CAS 64-17-5)</td>
<td>PEL</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td></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

#### 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>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: 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) 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.
- Vapor density: Not available.
- Relative 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.
- 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.

<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></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>20000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 ml/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Rat</td>
<td>76 mg/l, 4 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50.1 mg/l, 8 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Mouse</td>
<td>3000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>5340 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>5800 mg/kg</td>
</tr>
<tr>
<td>Other</td>
<td>Mouse</td>
<td>1297 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>5500 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
Cyclohexanone (CAS 108-94-1) Not classifiable as to carcinogenicity to humans.

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
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>Acetone (CAS 67-64-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></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>

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>Ethanol</td>
<td>-0.31</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, flammable (Ethanol, Acetone)
- Transport hazard class(es):
  - 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, 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
  - 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, flammable (Ethanol, Acetone)
- Transport hazard class(es):
  - Class: 3
  - Subsidiary risk: -
<table>
<thead>
<tr>
<th>Hazard No. (ADR)</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnel restriction code</td>
<td>Not available.</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

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.
- SARA 304 Emergency release notification
  - Not regulated.
  - 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**
  - Not regulated.
- **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
Ethanol (CAS 64-17-5) Low priority

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

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
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 29-Aug-2017
Version # 01

Disclaimer
This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

Other information
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
1. Product and Company Identification: Alternate Trade Names
Hazard(s) identification: Prevention
Hazard(s) identification: Response
Toxicological information: Eye contact
Toxicological information: Ingestion
Toxicological information: Inhalation
Toxicological information: Skin contact
### Explanation of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</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>