1. Identification

Product identifier: X4E41Series
Other means of identification: None.
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: Not classified.
Health hazards: Not classified.
Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements

Hazard symbol: None.
Signal word: None.
Hazard statement: Not available.
Precautionary statement
Prevention: Not available.
Response: Not available.
Storage: Not available.
Disposal: Not available.

Hazard(s) not otherwise classified (HNOCl): Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA. 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: This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012).

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>75-85</td>
</tr>
<tr>
<td>2-pyrrolidone</td>
<td></td>
<td>616-45-5</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Chemical name</td>
<td>Common name and synonyms</td>
<td>CAS number</td>
<td>%</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>------------</td>
<td>----</td>
</tr>
<tr>
<td>1,5-pentanediol</td>
<td></td>
<td>111-29-5</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Modified carbon black*</td>
<td>Proprietary*</td>
<td>&lt;5</td>
<td></td>
</tr>
<tr>
<td>Ethoxylated 2,4,7,9-tetramethyl-5-decyn-4,7-diol</td>
<td></td>
<td>9014-85-1</td>
<td>&lt;1</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).

Carbon black is present only in a bound form in this preparation.

---

### 4. First-aid measures

**Inhalation**

Remove 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**

None known.

**Special protective equipment and precautions for firefighters**

None 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.

**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**

Not available.

**Other**

Not available.

**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**: Not available.
- **Form**: Not available.
- **Color**: Black.
- **Odor**: Not available.
- **Odor threshold**: Not available.
- **pH**: 7.5 - 8.2

### Flash point
> 230.0 °F (> 110.0 °C) Setaflash Closed Cup

### Evaporation rate
Not determined

### Flammability (solid, gas)
- **Flammability limit - lower (%)**: Not determined
- **Flammability limit - upper (%)**: Not available.
- **Explosive limit - lower (%)**: Not available.
- **Explosive limit - upper (%)**: Not available.
- **Vapor pressure**: Not determined
- **Vapor density**: >= 1 (air = 1.0)

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

### Partition coefficient (n-octanol/water)
Not available.

### Auto-ignition temperature
Not available.

### Decomposition temperature
Not available.

### Viscosity
>= 2 cp

### Other information
For other VOC regulatory data/information see Section 15.
- **Oxidizing properties**: Not determined
- **VOC**: < 147 g/l

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**: Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
- **Skin contact**: Contact with skin may result in mild irritation.
- **Eye contact**: Contact with eyes may result in mild irritation.
- **Ingestion**: Health injuries are not known or expected under normal use.
Symptoms related to the physical, chemical and toxicological characteristics

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>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

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

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

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

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

Not expected to be harmful to aquatic organisms.

Ecotoxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>X4E41Series</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>
</tbody>
</table>

Components

<table>
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<td>Fathead minnow (Pimephales promelas)</td>
<td>&gt; 750 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.
13. Disposal considerations

Disposal instructions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Do not allow this material to drain into sewers/water supplies.
HP’s Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

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)
Not 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 - No
Delayed Hazard - No
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
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.

Other information
VOC content (less water, less exempt compounds) = <709 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, South Korea, New Zealand, and China.
16. Other information, including date of preparation or last revision

**Issue date**: 04-Jan-2018  
**Version #**: 01  

**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.

**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