1. Product and Company Identification

Material name: CH143Series
Version #: 03
Issue date: 02-May-2012
Revision date: 01-Oct-2013
Product use: Inkjet printing
CAS #: Mixture
Synonym(s): HP SC100 Yellow Ink
Company identification:
Hewlett-Packard Company
3000 Hanover Street
Palo Alto, CA 94304-1185
United States
Telephone 650-857-5020
Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 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. Hazards Identification

Emergency overview: Harmful by inhalation and in contact with skin. Contact with skin and eyes may result in irritation. Inhalation may result in respiratory irritation.

Potential health effects:
- Eyes: Avoid contact with eyes. Contact with eyes may result in irritation.
- Skin: Avoid contact with skin. Harmful in contact with skin. Contact with skin may result in irritation and Harmful if absorbed through the skin.
- Inhalation: Avoid breathing vapors or mists of this product. Harmful if inhaled. Inhalation may result in respiratory irritation.
- Ingestion: May be harmful if swallowed. Swallowing large amounts may cause digestive discomfort. Harmful if swallowed.
Other hazards: Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol, Monobutyl Ether Acetate</td>
<td>112-07-2</td>
<td>&lt;90</td>
</tr>
<tr>
<td>Cyclohexanone</td>
<td>108-94-1</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Propylene Glycol Monomethyl Ether Acetate</td>
<td>108-65-6</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

4. First Aid Measures

General advice: No information
First aid procedures:
- 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.
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.

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

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.

5. Fire Fighting Measures

Extinguishing media
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

Protection of 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
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.

Environmental precautions
Do not flush into surface water or sanitary sewer system.

Methods for cleaning up
Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Other information
Dispose of in compliance with federal, state, and local regulations.

7. Handling and Storage

Handling
Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Wear personal protective equipment.

Storage
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>US. ACGIH Threshold Limit Values Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>STEL</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<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>
</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>Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)</td>
<td>TWA</td>
<td>33 mg/m³</td>
</tr>
<tr>
<td>Propylene Glycol Monomethyl Ether Acetate (CAS 108-65-6)</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

## US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol Monomethyl Ether Acetate (CAS 108-65-6)</td>
<td>TWA</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

## US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>TWA</td>
<td>100 mg/m³</td>
</tr>
</tbody>
</table>

### Exposure guidelines

**US. ACGIH Threshold Limit Values**

- Cyclohexanone (CAS 108-94-1) Can be absorbed through the skin.

**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**
  - Wear appropriate chemical resistant clothing.
  - Wear appropriate chemical resistant gloves.

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

- **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 & Chemical Properties

- **Appearance**
  - Not available.

- **Physical state**
  - Not available.

- **Form**
  - Liquid.

- **Color**
  - Yellow.

- **Odor**
  - Solvent.

- **pH**
  - Not available.

- **Vapor pressure**
  - Not available.

- **Boiling point**
  - Not available.

- **Melting point/Freezing point**
  - Not available.

- **Solubility (water)**
  - 0.5 g/g

- **Specific gravity**
  - Not available.

- **Flash point**
  - 154.40 °F (68.00 °C) Closed Cup

- **Viscosity**
  - 5 - 15 cP

- **VOC**
  - 899 g/L

- **Other information**
  - No information available

### Other data

- **Chemical family**
  - Glycol Ether/Polymer/Pigment Blend

### 10. Chemical Stability & Reactivity Information

- **Chemical stability**
  - Stable at normal conditions.

- **Conditions to avoid**
  - Heat, flames and sparks.

- **Incompatible materials**
  - Not available.
Hazardous decomposition products
Not available.
Possibility of hazardous reactions
None known.

11. Toxicological Information

Toxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>Rabbit</td>
<td>1500 mg/kg</td>
</tr>
<tr>
<td>Oral LD50</td>
<td>Rat</td>
<td>2400 mg/kg</td>
</tr>
<tr>
<td>Other LD50</td>
<td>Mouse</td>
<td>754 mg/kg</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH Carcinogens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-BUTOXYETHYL ACETATE (EGBEA) (CAS 112-07-2) A3 Confirmed animal carcinogen with unknown relevance to humans.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CYCLOHEXANONE (CAS 108-94-1) A3 Confirmed animal carcinogen with unknown relevance to humans.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IARC Monographs. Overall Evaluation of Carcinogenicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclohexanone (CAS 108-94-1) 3 Not classifiable as to carcinogenicity to humans.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Serious eye damage/eye irritation | Not available. |
| Further information | Complete toxicity data are not available for this specific formulation |

12. Ecological Information

Aquatic toxicity
No information available.

Ecotoxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish LC50</td>
<td>Fathead minnow (Pimephales promelas) 481 - 578 mg/l, 96 hours</td>
<td></td>
</tr>
<tr>
<td><strong>Ecotoxicity</strong></td>
<td>No information available.</td>
<td></td>
</tr>
<tr>
<td><strong>Persistence and degradability</strong></td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td><strong>Bioaccumulation / Accumulation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bioaccumulative potential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Octanol/water partition coefficient log Kow Cyclohexanone 0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclohexanone 0.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
Basic shipping requirements:
UN number NA1993
### Proper shipping name
Combustible liquid n.o.s. (2-methoxy-1-methylethyl acetate, cyclohexanone) - Not regulated in quantities less than 119 gallons

### Hazard class
Combustible

### Packing group
III

### IATA
Not regulated as dangerous goods.

### IMDG
Not regulated as dangerous goods.

### RID
Not regulated as dangerous goods.

### 15. Regulatory Information

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

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**
Not listed.

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**
Not regulated.

**DEA Exempt Chemical Mixtures Code Number**
Not regulated.

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

#### CERCLA (Superfund) reportable quantity
Cyclohexanone: 5000

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories**
- Immediate Hazard - No
- Delayed Hazard - No
- Fire Hazard - Yes
- Pressure Hazard - No
- Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**
No

**SARA 311/312 Hazardous chemical**
No

**Other information**
Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).

VOC content (less water, less exempt compounds) = < 899 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)

**Other regulations**
Notified according to EU Regulations.

#### State regulations
**US - New Jersey RTK - Substances: Listed substance**
- Cyclohexanone (CAS 108-94-1) Listed.
- Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2) Listed.

**US. Massachusetts RTK - Substance List**
- Cyclohexanone (CAS 108-94-1)

**US. Pennsylvania RTK - Hazardous Substances**
- Cyclohexanone (CAS 108-94-1) Listed.

**US. Rhode Island RTK**
- Cyclohexanone (CAS 108-94-1)
16. Other Information

**HMIS® ratings**
- Health: 2
- Flammability: 2
- Physical hazard: 1
- Personal protection: B

**NFPA ratings**
- Health: 2
- Flammability: 2
- Instability: 1

**Disclaimer**
This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company 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.

**Other information**
This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

**Issue date**
02-May-2012

**This data sheet contains changes from the previous version in section(s):**
- Hazards Identification: Eyes
- Hazards Identification: Other hazards
- 5. Fire Fighting Measures: Protective equipment and precautions for firefighters
- GHS: Classification

**Manufacturer information**
Hewlett-Packard Company
3000 Hanover Street
Palo Alto, California 94304-1112 US
Product Information 1-800-925-0563

**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>