1. Product and Company Identification

**Material name:** CN797Series  
**Version #:** 03  
**Issue date:** 23-Apr-2010  
**Revision date:** 18-Nov-2013  
**Product use:** Inkjet printing.  
**CAS #:** Mixture  
**Synonym(s):** HP FR100 Black 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) 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. 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**  
Contact with eyes may cause irritation. Avoid contact with eyes. Contact with eyes may result in irritation and Direct contact with the eye may cause discomfort and redness.

**Skin**  
Avoid contact with skin. Harmful in contact with skin. Prolonged and/or repeated skin contact may result in mild irritation or redness and 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. Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract. Inhalation may result in respiratory irritation.

**Ingestion**  
May be harmful if swallowed. Ingestion may result in nausea, vomiting and diarrhea. Swallowing large amounts may cause digestive discomfort. Harmful if swallowed.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous 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;60</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>

<table>
<thead>
<tr>
<th>Non-hazardous components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butyl carbitol acetate</td>
<td>124-17-4</td>
<td>&lt;20</td>
</tr>
<tr>
<td>Acrylic Resin</td>
<td>Proprietary</td>
<td>&lt;5</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**
Suitable extinguishing media: sand, carbon dioxide (CO2), and dry chemical.

**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>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></td>
<td>TWA</td>
<td>20 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>

**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>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>Components</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>Cyclohexanone (CAS 108-94-1)</td>
<td>TWA</td>
<td>100 mg/m³</td>
</tr>
<tr>
<td>Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)</td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 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>
<tr>
<td></td>
<td></td>
<td>25 ppm</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**
  - Liquid.

- **Form**
  - Liquid.

- **Color**
  - Black.

- **Odor**
  - Solvent.

- **pH**
  - Not available.

- **Vapor pressure**
  - Not available.

- **Boiling point**
  - Not available.

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

- **Solubility (water)**
  - Not available.

- **Specific gravity**
  - Not available.

- **Flash point**
  - 161.60 °F (72.00 °C) (Closed Cup)

- **VOC**
  - < 885 g/L

- **Other information**
  - For other VOC regulatory data/information see Section 15.

- **Other data**
  - **Chemical family**
    - Nur Solvent Based ink

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>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butyl carbitol acetate (CAS 124-17-4)</td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
</tr>
<tr>
<td>Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)</td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
</tr>
</tbody>
</table>

Carcinogenicity

ACGIH Carcinogens
2-BUTOXYETHYL ACETATE (EGBEA) (CAS 112-07-2) A3 Confirmed animal carcinogen with unknown relevance to humans.
CYCLOHEXANONE (CAS 108-94-1) A3 Confirmed animal carcinogen with unknown relevance to humans.

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

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</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas) 481 - 578 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

Ecotoxicity
No information available.

Persistence and degradability
Not available.

Bioaccumulation / Accumulation
13. Disposal Considerations

Waste codes

**US RCRA Hazardous Waste U List: Reference**

Cyclohexanone (CAS 108-94-1) U057

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**

All ingredients are listed or exempt

**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 - Yes
- Fire Hazard - Yes
- Pressure Hazard - No
- Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

- No

**SARA 311/312 Hazardous chemical**

- No

**Other information**

- VOC content (less water, less exempt compounds) = 885 g/L (U.S. requirement, not for emissions)
- VOC data based on formulation (Organic compounds minus solids)
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

**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**
23-Apr-2010

**This data sheet contains changes from the previous version in section(s):**
- Product and Company Identification: Synonyms
- Composition / Information on Ingredients: Ingredients
- 5. Fire Fighting Measures: Protective equipment and precautions for firefighters
- 9. Physical & Chemical Properties: Other information
- 15. Regulatory Information: Other information

**Manufacturer information**
Hewlett-Packard Company
3000 Hanover Street
Palo Alto, California 94304-1112 US
(Direct) +972 (9) 892-4628
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