1. Product and Company Identification

Material name: CN882Series
Version #: 01
Issue date: 15-Nov-2013
Product use: Inkjet printing
Synonym(s): HP MF60 Cleaner
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

Potential health effects
- Eyes: Irritating to eyes.
- Inhalation: Inhalation may cause drowsiness or dizziness.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone</td>
<td>78-93-3</td>
<td>100</td>
</tr>
</tbody>
</table>

4. First Aid Measures

General advice: No information
First aid procedures
- Eye contact: Immediately flush eye(s) with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If irritation persists get medical attention.
- Skin contact: Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
- Inhalation: Move to fresh air. If symptoms persist, get medical attention.
- Ingestion: If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

5. Fire Fighting Measures

Flammable properties: Flammable Liquid.
Extinguishing media
- Suitable extinguishing media: CO2, water, dry chemical, or foam
Protection of firefighters
- Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Fire fighting equipment/instructions: Containers can build up pressure if exposed to heat (fire). Use water spray to cool unopened containers.
6. Accidental Release Measures

Personal precautions
Evacuate the area promptly. Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Wear appropriate personal protective equipment.

Environmental precautions
Avoid release to the environment. Refer to special instructions/safety data sheets.

Methods for cleaning up
Prevent product from entering drains. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

7. Handling and Storage

Handling
Do not handle or store near an open flame, heat or other sources of ignition. Use with adequate ventilation. Take precautionary measures against static discharges.

Storage
Keep container closed when not in use. Keep away from heat and sources of ignition. Keep only in original container.

8. Exposure Controls / Personal Protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone (CAS 78-93-3)</td>
<td>STEL</td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone (CAS 78-93-3)</td>
<td>PEL</td>
<td>590 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone (CAS 78-93-3)</td>
<td>STEL</td>
<td>885 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>590 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
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<td>STEL</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Engineering controls
Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Explosion proof exhaust ventilation should be used.

Personal protective equipment

Eye / face protection
Wear eye/face protection.

Skin protection
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

9. Physical & Chemical Properties

Appearance
Not available.

Physical state
Not available.

Form
Not available.
10. Chemical Stability & Reactivity Information

**Chemical stability**
Stable under normal storage conditions.

**Conditions to avoid**
No information available.

**Incompatible materials**
Not available.

**Hazardous decomposition products**
Stable under normal conditions.

**Possibility of hazardous reactions**
Will not occur.

11. Toxicological Information

**Toxicological data**

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone (CAS 78-93-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 8000 mg/kg</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>11000 mg/l, 45 Minutes</td>
</tr>
<tr>
<td>Rat</td>
<td>11700 mg/l, 4 Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>670 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>2300 - 3500 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>1660 g/kg, 24 Hours</td>
</tr>
<tr>
<td>Rat</td>
<td>12290 mg/kg, 24 Hours</td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No data available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Further information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete toxicity data are not available for this specific formulation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Ecological Information

**Ecotoxicological data**

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl Ethyl Ketone (CAS 78-93-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crustacea</strong></td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td><strong>Fish</strong></td>
<td>LC50</td>
<td>Sheepshead minnow (Cyprinodon variegatus)</td>
</tr>
<tr>
<td><strong>Ecotoxicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No information available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Persistence and degradability
Not available.

Bioaccumulation / Accumulation

Bioaccumulative potential
Octanol/water partition coefficient log Kow
Methyl Ethyl Ketone 0.29

Partition coefficient
Methyl Ethyl Ketone 0.29

13. Disposal Considerations

Waste codes
US RCRA Hazardous Waste U List: Reference
Methyl Ethyl Ketone (CAS 78-93-3) U159

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 UN1193
Proper shipping name Ethyl Methyl Ketone (Methyl Ethyl Ketone)
Hazard class 3
Packing group II

IATA
UN number UN1193
UN proper shipping name Ethyl Methyl Ketone (Methyl Ethyl Ketone)
Transport hazard class(es) 3
Packing group II

IMDG
UN number UN1193
UN proper shipping name Ethyl Methyl Ketone (Methyl Ethyl Ketone)
Transport hazard class(es) 3
Packing group II

RID
Basic shipping requirements:
Proper shipping name Ethyl Methyl Ketone (Methyl Ethyl Ketone)
Hazard class 3
UN number 1193
Packing group II
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**

- Methyl Ethyl Ketone (CAS 78-93-3) 145 KG
- Methyl Ethyl Ketone (CAS 78-93-3) 50 GALLONS

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

- Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

- Methyl Ethyl Ketone (CAS 78-93-3) 6714

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA (Superfund) reportable quantity**

Methyl Ethyl Ketone: 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**
  - VOC content (less water, less exempt compounds) = < 800 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**
  - Methyl Ethyl Ketone (CAS 78-93-3) Listed.

- **US. Massachusetts RTK - Substance List**
  - Methyl Ethyl Ketone (CAS 78-93-3)

- **US. Pennsylvania RTK - Hazardous Substances**
  - Methyl Ethyl Ketone (CAS 78-93-3) Listed.
16. Other Information

HMIS® ratings
- Health: 2
- Flammability: 3
- Physical hazard: 0

NFPA ratings
- Health: 2
- Flammability: 3
- Instability: 0

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
15-Nov-2013

This data sheet contains changes from the previous version in section(s):
- Physical & Chemical Properties: Multiple Properties
- 14. Transport Information: Material Transportation 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

<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>