Product Safety Information Sheet
The Product Safety Information Sheet for this article provides
general environmental and safety information for consumers

Date of issue: August 1, 1997
N/A = not applicable  N/Av = not available

Hewlett-Packard Company

1. Identification of the preparation and of the company
   1.1 Identification of the preparation
      Trade name  HP 51633M (Ink Cartridge for DeskJet Portable, 310, 320, 340
                   DeskWriter 310, 320)

   1.2 Company identification
      Hewlett-Packard Company
      1000 N.E. Circle Boulevard
      Corvallis, OR 97330-4239
      Telephone: 208 323-2551

   1.3 Emergency telephone number
      Hewlett-Packard Healthline
      Telephone: int+1 503 494-7199 outside USA
                 int+1 800 457-4209 in USA

<table>
<thead>
<tr>
<th>Hazard Rating</th>
<th>NFPA</th>
<th>HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Composition/information on ingredients
   This product contains a preparation in a cartridge. It is an aqueous solution of several specific
   compounds of an ink formulation.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>% by weight</th>
<th>Workplace Limits (PEL, TLV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret Colorants</td>
<td>Not Specified</td>
<td>&lt;5</td>
<td>Not established</td>
</tr>
<tr>
<td>2-Pyrrolidone</td>
<td>616-45-5</td>
<td>&lt;10</td>
<td>Not established</td>
</tr>
<tr>
<td>Trade Secret Organic Materials</td>
<td>Not Specified</td>
<td>&lt;5</td>
<td>Not established</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Balance</td>
<td>Not established</td>
</tr>
</tbody>
</table>

2.1 Additional information
   None

3. Possible Hazards
   3.1 Hazards identification
       No particular hazards known.

   3.2 Critical hazards to humans
       May cause slight skin irritation characterized by redness and swelling after prolonged contact. May cause
       stomach upset after ingestion. May cause mild eye irritation.

   3.3 Critical hazards to the environment
       No particular hazards known.
4. First aid measures - Call Hewlett-Packard Healthline
   4.1 General information
      Remove clothing that is soaked with liquid.
   4.2 after inhalation
      N/A
   4.3 after contact with skin
      After contact of liquid with skin wash off immediately with soap and water.
   4.4 after contact with eyes
      After contact of liquid with eyes immediately flush with large amounts of clean, lukewarm (low pressure) water for at least 15 minutes and seek medical advice.
   4.5 after ingestion
      After ingestion of liquid call physician immediately. Call Hewlett-Packard Healthline.
   4.6 Information for the physician
      Symptoms  See Section 3.
      Hazards  Frequent and persistent contact with the skin can cause mild irritation.
      Treatment  Do not induce vomiting. Treat symptomatically.

5. Fire-fighting measures
   5.1 Suitable extinguishing media
      Water spray jet, foam, carbon dioxide, dry powder.
   5.2 Extinguishing media which must not be used for safety reasons
      Full water jet.
   5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
      Carbon monoxide, carbon dioxide, sulfur oxides, nitrogen oxides.
      Emits toxic fumes under fire conditions.
   5.4 Special protective equipment for firefighters
      Use breathing apparatus.
   5.5 Further information
      Use water spray to cool fire-exposed containers. Do not inhale combustion gases.

6. Accidental release measures
   6.1 Personal precautions
      (See also section 8., Personal protection)
      Ensure adequate ventilation.
   6.2 Environmental precautions
      (See also section 13., Disposal considerations)
      Do not discharge into the sewer.
   6.3 Methods for cleaning up / taking up
      Clean up spilled liquid with absorbent material.
      Send in suitable containers for recovery or disposal.
7. **Handling and storage** (National measures see sections 15. and 16.)

7.1 **Handling**

*Advice on safe handling*
Handle with care. Avoid release of liquid from the cartridge.

*Advice on protection against fire and explosion*
No special measures necessary.

7.2 **Storage**

*Requirements for storage rooms and vessels*
No special measures necessary.

*Advice on storage compatibility*
Liquid: do not store together with explosive substances.

*Further information on storage conditions*
None.

*Storage class (for Germany only)*
LGK 10.

8. **Exposure controls / personal protection**

8.1 **Additional advice on system design**
None.

8.2 **Personal protective equipment (for liquid ink)**

*Respiratory protection*: N/A

*Hand protection*: Safety gloves.

*Eye protection*: Safety glasses.

*Body protection*: N/A

*General protective measures and hygiene measures*:
Avoid contact of liquid with eyes and skin. Do not inhale vapors. Change clothing soaked with liquid immediately.

9. **Physical and chemical properties**

9.1 **Appearance (liquid ink)**

*Physical state*: liquid

*Color*: black

*Odor*: N/A

9.2 **Data relevant to safety**

*PH (as supplied)*: 8.3 - 8.7

*(of an aqueous solution)*: N/A

*Flash point (°C), c.c.*: > 61

*Solubility in water*: miscible

*Content of solvent*: 5-10%

10. **Stability and reactivity**

10.1 **Conditions to avoid / materials to avoid**
If product is heated above decomposition temperature, toxic vapors may be released.

10.2 **Hazardous decomposition products**
Nitrogen oxides, sulfur oxides, carbon monoxide, carbon dioxide.

11. **Toxicological information**

11.1 **Toxicological examination**
Sensitization test: negative (analogous to product with a similar composition).

11.2 **Experiences made in practice**
Frequent and persistent contact of liquid with the skin can cause mild irritation.

11.3 **General remarks**
This product has not been tested. This information is derived from a product of similar composition. Based on these test results, this product does not require a hazard warning label in accordance with EC directives/German regulations on dangerous substances.

12. **Ecological information**
This product has not been tested.

*Behavior in sewage plants*
This product has not been tested.
13. Disposal considerations
13.1 Product / unused product
   Recommendation: Consultation with the disposal agency and the relevant authorities.

13.2 Contaminated packaging
   Recommendation: Consultation with the disposal agency and the relevant authorities.
   Recommended cleansing agent: water

14. Transport information
14.1 Road transport ADR / RID / GGVS / GGVE
   Not dangerous good according to the regulations above.

14.2 Marine transport IMDG-Code
   Not dangerous good according to the regulation above.

14.3 Air transport ICAO / IATA-DGR
   Not dangerous good according to the regulation above.

15. Regulatory information
   This product is considered an article. This article does not require a hazardous warning label.

16. Other information
16.1 Keeping (restrictions)
   Recommended use: N/A (for Germany only)
   Distribution to: ink
   Industry consumer, private consumer

16.2 Technical contact point
   USA / Hewlett Packard General Information, Telephone: int+1 208 323-2551

16.3 This information is based on our present state of knowledge.
   It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application.