Material Safety Data Sheet

1.0 Product and Company Identification

Identification of the preparation: Ç6578 Series – No 78 Color
Use of the preparation: Inkjet printing
Company Identification: Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis, Oregon 97330-4239
United States
Emergency telephone number
1-800-457-4209 (USA and Canada)
503-494-7199 (USA direct)
Singapore: +001-800-332-13321
Hewlett-Packard Health Effects Line:
General information telephone number:
208-323-2551 (USA direct)
Local Contact Information
Ireland
Liffey Park Technology Campus
Barnhall Road,
Leixlip, Co. Kildare
Phone: 01 6150000
United Kingdom
Hewlett-Packard, Ltd.
Cain Road, Amen Corner
Bracknell, Berkshire, RG12 1HN
Phone: 1344 36-0000

<table>
<thead>
<tr>
<th>Hazard Rating</th>
<th>NFPA/HMIS</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Instability/Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Special</td>
<td>none</td>
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</tbody>
</table>

2.0 Composition/Information on Hazardous Ingredients

This ink supply contains an aqueous ink formulation

For cyan (blue) ink only:

<table>
<thead>
<tr>
<th>Component/Substance</th>
<th>CAS Number</th>
<th>EU Number</th>
<th>% by Weight</th>
<th>EU classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alkyldiol</td>
<td>confidential</td>
<td>confidential</td>
<td>&lt;10</td>
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<tr>
<td>2-Pyrrolidone</td>
<td>616-45-5</td>
<td>210-843-1</td>
<td>&lt;8</td>
<td>Xi; R36/37/38</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
<td>6484-52-2</td>
<td>229-347-8</td>
<td>&lt;3</td>
<td>O; Xi; R8-36/37/38</td>
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<tr>
<td>Metal nitrate</td>
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<td>O; Xi; R8-36/37/38</td>
</tr>
<tr>
<td>1,5-Pentanediol</td>
<td>111-29-5</td>
<td>203-854-4</td>
<td>&lt;10</td>
<td>not classified</td>
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<tr>
<td>Alkyldiol ethoxylate #1</td>
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<td>confidential</td>
<td>&lt;3</td>
<td>Xi; R38-41</td>
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<td>confidential</td>
<td>confidential</td>
<td>&lt;3</td>
<td>Xi; R36/38</td>
</tr>
</tbody>
</table>

June 29, 2002
Material Safety Data Sheet

| Substituted phthalocyanine salt | confidential | confidential | <4 | Xn; N; R22-48/22-51/53 |
| Water                          | 7732-18-5    | 231-791-2    | >50 | not classified |

For magenta (red) ink only:

<table>
<thead>
<tr>
<th>Component/Substance</th>
<th>CAS Number</th>
<th>EU Number</th>
<th>% by Weight</th>
<th>EU classification</th>
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<tbody>
<tr>
<td>Ethyl alkyldiol</td>
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</tr>
<tr>
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<td>Xi; R36/38</td>
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<tr>
<td>Amino alkyldiol</td>
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<td>Xi; R36/37/38</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>&gt;50</td>
<td>not classified</td>
</tr>
</tbody>
</table>

For yellow ink only:

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<th>EU Number</th>
<th>% by Weight</th>
<th>EU classification</th>
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</thead>
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<td>confidential</td>
<td>&lt;10</td>
<td>not classified</td>
</tr>
<tr>
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<td>210-843-1</td>
<td>&lt;8</td>
<td>Xi; R36/37/38</td>
</tr>
<tr>
<td>Ammonium nitrate</td>
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<tr>
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3.0 Hazard Identification

The cyan ink is classified for environmental effects according to EU Directive 1999/45/EC with R52-53. The magenta and yellow inks are not classified according to EU Directive 1999/45/EC.

3.1 Routes of Exposure

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.

3.2 Acute Health Hazards

Any potential hazards are presumed to be due to exposure to the components.

Ethyl alkyldiol: Contact with eyes and skin may cause mild
Material Safety Data Sheet

irritation.

2-Pyrrolidone: Contact with eyes and skin may result in irritation. Inhalation may result in respiratory irritation. Ingestion may result in nausea, vomiting, and diarrhea.

Ammonium nitrate and metal nitrate: Contact with eyes and skin may cause irritation. Inhalation may cause respiratory irritation.

Note: Nitrates and their derivatives can cause methemoglobinemia and result in respiratory depression. Primary indicators of prolonged exposure include shortness of breath, headaches, dizziness and cyanosis (bluish skin and lips).

1,5-Pentanediol: Contact with eyes and skin may cause irritation.

Alkyldiol ethoxylate #1: Contact with eyes may result in severe irritation and corneal injury. Contact with skin may result in severe irritation. Ingestion may cause irritation of mouth and throat, nausea, vomiting and diarrhea.

Alkyldiol ethoxylate #2: Contact with eyes and skin may result in severe irritation. Ingestion may cause irritation of mouth, throat, nausea, vomiting, and diarrhea.

Cyan Ink Only:

Substituted phthalocyanine salt: Harmful if swallowed.

Magenta Ink Only:

Amino Alkyldiol: Contact with eyes and skin may result in irritation. Inhalation may result in respiratory irritation.

3.3 Chronic Health Hazards

Cyan Ink Only:

Substituted phthalocyanine salt: Prolonged ingestion exposure may result in serious damage to health.

3.4 Carcinogenicity

None of the components present in this formulation at concentrations equal to or greater than 0.1% are listed by EU, MAK, IARC, NTP or OSHA.

4.0 First Aid Measures

Emergency telephone number 1-800-457-4209 (USA and Canada)
Hewlett-Packard Health Effects 503-494-7199 (USA direct)
Line: Singapore: +001-800-332-13321
Inhalation: Remove to fresh air. If symptoms persist, consult a physician.
Ingestion: If stomach upset persists, consult a physician.
Skin: Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.

June 29, 2002
Material Safety Data Sheet

Eyes: Do not rub eyes. Immediately flush with large amounts of clean, lukewarm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists, consult a physician.

5.0 Fire Fighting Measures

Extinguishing media: Water, dry chemical, carbon dioxide, foam
Unsuitable Extinguishing Media: None known
Special Firefighting Procedures: None known
Unusual fire and explosion hazards: No special hazards known
Auto-ignition temperature: Not determined
Flashpoint (method): > 200° F, > 93.3° C (US EPA Method 1020)
Hazardous Combustion Products: Refer to section 10.

6.0 Accidental release measures

Spill or Leak Procedures: Standard eye and skin protection is recommended.
Environmental precautions: Do not discharge into drains (See also Section 13, Disposal considerations)

7.0 Handling and Storage

Storage Temperature: 59° F to 95° F; 15° C to 35° C
Handling and Storage precautions: Keep out of the reach of children
Shelf Life: 1 year
Special Sensitivity: None

8.0 Exposure control/ personal protection

8.1 Exposure Limit Values: None established.
8.2 Exposure Controls: Standard eye and skin protection for laboratory chemical safety is recommended. Use in well ventilated area.
Material Safety Data Sheet

9.0 Physical and chemical properties

- **pH:** 6.6 – 8.5
- **Boiling point:** Not Determined
- **Flash point:** > 200° F, > 93.3° C
- **Flammability:** US NFPA/HMIS Flammability rating = 1
- **Explosive properties:** Not applicable
- **Oxidizing properties:** Not applicable
- **Vapor Pressure:** Not applicable
- **Relative density:** Specific Gravity 1.0 to 1.2
- **Solubility:** Soluble in water
- **Partition coefficient:** Not determined
- **Viscosity:** Not determined
- **Vapor density:** >1 (air = 1.0)
- **Evaporation rate:** Not applicable
- **Other:** Not applicable

10.0 Stability and reactivity

- **Stability:** Stable under normal storage conditions
- **Incompatibilities:** Strong oxidizers, strong gases, bleach and other hypo-chlorite containing cleaning agents
- **Thermal decomposition products:** Oxides of carbon/nitrogen/sulfur; water
- **Hazardous polymerization:** None

11.0 Toxicological information

Refer to Section 3 for potential health effects and Section 4 for first aid measures. Ink formulations have not been tested.

12.0 Ecological information

- **Cyan, Magenta, Yellow Inks:**
  - 96 Hour LC50: LC50 < 400mg/L
  - 96 Hour LC50: Survival (100mg/L) = 100%
  - Fathead minnow
  - Survival (10mg/L) = 100%
  - Trout

13.0 Disposal considerations

Dispose in accordance with all applicable US Federal, state, local, and country laws.

14.0 Transportation information

Not a regulated article under United States DOT, IATA, ADR, or RID.
Material Safety Data Sheet

UN Number: Not applicable
Class: Not applicable
Proper Shipping Name: Not applicable
Packing Group: Not applicable
Marine Pollutant: Not listed
Special Precautions: None noted

15.0 Regulatory information

US EPA TSCA Inventory: All ingredients are listed or exempt.
US EPA TSCA 12(b): Does not contain listed chemicals.
EU Notification: All ingredients are listed on EINECS and/or ELINCS or exempt.
EU Hazard Label (1999/45/EC): Product may require a label according to EU Directive 1999/45/EC

16.0 Other information

Date Prepared: June 29, 2002
HP-DMS Document Control Number: 09000de78022847b-eng
Revision Information: This document replaces all prior versions of the MSDS
EU Risk (R) Phrase definitions:
R8: Contact with combustible material may cause fire
R22: Harmful if swallowed
R38: Irritating to skin
R41: Possible risks of irreversible effects
R36/38: Irritating to eyes and skin
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R36/37/38: Irritating to eyes, respiratory system and skin.

Other Information: This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC and USA OSHA Hazard Communications regulations (29CFR1910:1200).

DISCLAIMER: This Material Safety Data Sheet (MSDS) is provided without charge to customers of Hewlett-Packard. Data is the most current known to Hewlett-Packard at the time of preparation of this MSDS 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.