REPRESENTATIVE MSDS - SPECIFIC MSDS AVAILABLE FROM SAFETY OFFICE 412-252-2403

Material Safety Data Sheet

1.0 Product and Company Identification

Identification of the preparation: **C4844A - No. 10 Black**

Use of the preparation: **Inkjet printing**

Company Identification:
Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis, Oregon 97330-4239
United States

Emergency telephone number Hewlett-Packard Health Effects Line:
1-800-457-4209 (USA and Canada)
503-494-7199 (USA direct)
Singapore: +001-800-332-13321

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

Hazard Rating	NFPA/HMIS
Health	1
Flammability	1
Instability/Reactivity	0
Special	none

2.0 Composition/Information on Hazardous Ingredients

This ink supply contains an aqueous ink formulation

Component/Substance	CAS Number	EU Number	% by Weight	EU Classification
2-pyrrolidone	616-45-5	210-483-1	< 9	Xi; R36/37/38
Carbon Black	1333-86-4	215-609-9	< 5	not classified
Water	7732-18-5	231-791-2	> 50	not classified

3.0 Hazard Identification

This ink is not classified according to EU Directive 1999/45/EC.

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.

Acute Health Hazards: Any potential hazards are presumed to be due to exposure to the components.

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.

Chronic Health Hazards: Carbon Black: Chronic inhalation studies performed with fine dust particles resulted in lung tumors in animals. The IARC classification was based upon these results. IARC also concluded "there is inadequate evidence in humans for the carcinogenicity of carbon black." Inhalation of fine dust particles is not expected to occur during normal conditions of use of this ink.

Carcinogenicity: Carbon black has been classified by the International Agency for Research on Cancer (IARC) as Group 2B (possibly human carcinogen). None of the other ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP or OSHA.

4.0 First Aid Measures

Emergency telephone number	1-800-457-4209 (USA and Canada)
Hewlett-Packard Health Effects Line:	503-494-7199 (USA direct) 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.

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.

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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. Keep away from extreme heat or cold.

Shelf Life: I year

Special Sensitivity: None

8.0 Exposure control/ personal protection

Exposure Limit Values: Carbon black: OSHA, ACGIH, Canada, Denmark, Finland, France, Ireland, Italy, Netherlands, Norway, UK TWA = 3.5mg/m^3; Belgium TWA=3.6mg/m^3; Germany TWA=6mg/m^3

Exposure Controls: Standard eye and skin protection for laboratory chemical safety is recommended. Use in well ventilated area.

9.0 Physical and chemical properties

pH: 8.5 (8.2 – 8.8)

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 and bases
Thermal decomposition products:	Oxides of carbon/nitrogen/sulfur, water
Hazardous polymerization:	None

11.0 Toxicological information

Refer to Section 3 for potential heath effects and Section 4 for first aid measures

Ink formulation has not been tested.

12.0 Ecological information

Ink Formulation:
Acute Bioassay (fathead minnow): 96 hour LC_{50} < 400 mg/L

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.

UN Number:	Not applicable
Class:	Not applicable
Proper Shipping Name:	Not applicable
Packing Group:	Not applicable
Marine Pollutant:	Not listed

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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): This product does not require a label according to EU Directive 1999/45/EC.

16.0 Other information

Date Prepared: October 24, 2002

HP-DMS Document Control Number: 09000de78022a092-eng

Revision Information: Version 2.0 - October 24, 2002 – Section 8 added exposure limit values for carbon black.

EU Risk (R) Phrase definitions: 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 Communication Standard (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.