



# Material Safety Data Sheet

## 1.0 Product and Company Identification

**Identification of the preparation:** **C4836A – No 11 Cyan**

**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)  
**Hewlett-Packard Health Effects Line:** 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	210-843-1	<8	Xi; R36/37/38
1,5-Pentanediol	111-29-5	203-854-4	<15	not classified
Tetraethylene glycol	112-60-7	203-989-9	<5	Xi; R36/37/38
Alkylquaternaryamine salt	mixture	mixture	<4	Xi; R36/38
Alkyldicarboxylic acid	confidential	confidential	<4	Xi; R36/37/38
Water	7732-18-5	231-791-2	> 50	not classified



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## 3.0 Hazard Identification

This cyan 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.

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

Tetraethylene glycol: Contact with eyes and skin may cause irritation. Inhalation may result in respiratory irritation.

Alkylquaternaryamine salt: Contact with skin or eyes may result in irritation.

Alkyldicarboxylic acid: Contact with eyes and skin may result in irritation. Inhalation may result in respiratory irritation.

**Chronic Health Hazards:** None known

**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.



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**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. Keep away from extreme heat or cold.

**Shelf Life:** 1 year

**Special Sensitivity:** None

## 8.0 Exposure control/ personal protection

**Exposure Limit Values:** Tetraethylene glycol: Austria, Germany, Netherlands, Switzerland TWA= 1000ppm

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



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## 9.0 Physical and chemical properties

**pH:** 3.8 – 4.2  
**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 health effects and Section 4 for first aid measures  
This ink formulation has not been tested.

## 12.0 Ecological information

Ink Formulation:  
96 Hour LC50 LC50 = 461 mg/L Fathead minnow

## 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



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

## 16.0 Other information

**Date Prepared:** August 2, 2002  
**HP-DMS Document Control Number:** 09000de78022e1e4-eng  
**Revision Information:** This document replaces all prior versions of the MSDS  
**EU Risk (R) Phrase definitions:** R36/38: Irritating to eyes and skin  
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.