



Material Safety Data Sheet

1.0 Product and Company Identification

Identification of the preparation: C9423A No 85 Light 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 printhead 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	<5	not classified
Ethyl alkyl diol	confidential	confidential	<14	not classified
Alkyl diol ethoxylate	confidential	confidential	<3	Xi; R38-41
Substituted phthalocyanine salt	confidential	confidential	<3	Xn; N; R22-48/22-51/53
Water	7732-18-5	231-791-2	> 50	not classified



Material Safety Data Sheet

3.0 Hazard Identification

The light cyan ink is classified for environmental effects according to EU Directive 1999/45/EC with R52-53.

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.

Ethyl alkyldiol: Contact with eyes and skin may cause mild irritation.

Alkyldiol ethoxylate: 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, throat, nausea, vomiting and diarrhea.

Substituted phthalocyanine salt: Harmful if swallowed.

Chronic Health Hazards: Substituted phthalocyanine salt: Prolonged ingestion exposure may cause damage to health.

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
Hewlett-Packard Health Effects
Line:**

1-800-457-4209 (USA and Canada)
503-494-7199 (USA direct)
Singapore: +001-800-332-13321



Material Safety Data Sheet

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.

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

Handling and Storage precautions: Keep out of the reach of children. Keep away from extreme heat or cold.

Special Sensitivity: None

8.0 Exposure control/ personal protection

Exposure Limit Values: None established

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:	7.7 - 8.3
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

Static Acute Toxicity	Survival (100mg/L) = 100%	Trout
	Survival (10mg/L) = 100%	
96 hr LC50	<400 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



Material Safety Data Sheet

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): R 52-53 (definition can be found in sec 16)

16.0 Other information

Date Prepared: March 12, 2004
HP-DMS Document Control Number: 09000de8004cb06-eng
Revision Information: This document replaces all prior versions of the MSDS
EU Risk (R) Phrase definitions: R22: Harmful if swallowed
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.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R41: Risk of serious damage to eyes
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.