



SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking

Identification of the preparation Q2290A

Use of the preparation Inkjet printing

Company identification Hewlett-Packard, Ltd.
Cain Road, Amen Corner
Bracknell, Berkshire, RG12 1HN

Emergency telephone number

Poison Information Center 0207771 5307

Hewlett-Packard health effects line

(Toll-free within the US) 1-800-457-4209
(Direct) 1-503-494-7199

General information telephone number

1 344 36-0000
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551

Date prepared 24-Jan-2007

SDS number 149908

2. Composition/information on ingredients

Component/substance	CAS number	% by weight	EU number	EU classification
Cyan ink				
Water	7732-18-5	> 60	231-791-2	
1,5-pentanediol	111-29-5	< 10	203-854-4	
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi; R36/38
Metal nitrate #2	Proprietary	< 7.5	Proprietary	F; R36/37/38, 8
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41
Substituted phthalocyanine salt #2	Proprietary	< 2.5	Proprietary	Xn, N; R22, 48/22, 51/53
Ammonium nitrate	6484-52-2	< 2.5	229-347-8	Xi, O; R36/37/38, 52, 8
Magenta ink				
Water	7732-18-5	> 60	231-791-2	
1,5-pentanediol	111-29-5	< 10	203-854-4	
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi; R36/38
Metal nitrate #2	Proprietary	< 7.5	Proprietary	F; R36/37/38, 8
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41
Amino alkyldiol	Proprietary	< 2.5	Proprietary	
Ammonium nitrate	6484-52-2	< 2.5	229-347-8	Xi, O; R36/37/38, 52, 8
Yellow ink				
Water	7732-18-5	> 60	231-791-2	
1,5-pentanediol	111-29-5	< 10	203-854-4	
Ethyl alkyldiol	Proprietary	< 7.5	Proprietary	
2-pyrrolidone	616-45-5	< 7.5	210-483-1	Xi; R36/38
Metal nitrate #2	Proprietary	< 7.5	Proprietary	F; R36/37/38, 8
Alkyldiol ethoxylate	Proprietary	< 2.5	Proprietary	Xn; R21/22, 38, 41
Ammonium nitrate	6484-52-2	< 2.5	229-347-8	Xi, O; R36/37/38, 52, 8



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Composition comments

This ink supply contains an aqueous ink formulation.
This product has been evaluated using criteria specified in the EU Directives 67/548/EEC and 1999/45/EC, as amended.
For the full text of the R phrases mentioned in this Section, see Section 16.

3. Hazards Identification

Classification

R52/53, S61

Emergency Overview

Contact with skin and eyes may result in irritation.

Acute health effects

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

Skin contact

1,5-pentanediol

Contact with skin may result in irritation.

2-pyrrolidone

Contact with skin may result in irritation.

Alkyldiol ethoxylate

Contact with skin may result in severe irritation.

Amino alkyldiol

Contact with skin may result in irritation.

Ammonium nitrate

Contact with skin may result in irritation.

Ethyl alkyldiol

Contact with skin may result in mild irritation.

Metal nitrate #2

Contact with skin may result in irritation.

Eye contact

1,5-pentanediol

Contact with eyes may result in irritation.

2-pyrrolidone

Contact with eyes may result in irritation.

Alkyldiol ethoxylate

Contact can cause moderate to severe irritation and possible injury to the eyes.

Amino alkyldiol

Contact with eyes may result in irritation.

Ammonium nitrate

Contact with eyes may result in irritation.

Ethyl alkyldiol

Contact with eyes may result in mild irritation.

Metal nitrate #2

Contact with eyes may result in irritation.

Inhalation

2-pyrrolidone

Inhalation may result in respiratory irritation.

Amino alkyldiol

Inhalation may result in respiratory irritation.

Ammonium nitrate

Inhalation may result in respiratory irritation.

Metal nitrate #2

Inhalation may result in respiratory irritation.



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Ingestion

2-pyrrolidone

Ingestion may result in nausea, vomiting and diarrhea.

Alkyldiol ethoxylate

Ingestion may cause irritation of mouth, throat, nausea, vomiting and diarrhea.

Ammonium nitrate

Contains nitrate salts, may cause methemoglobinemia.

Metal nitrate #2

Contains nitrate salts, may cause methemoglobinemia.

Substituted phthalocyanine salt # 2

Harmful if swallowed.

Potential health effects

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.

Chronic health effects

Cyan ink:

Substituted phthalocyanine salt: Prolonged ingestion exposure may cause serious 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.

Other information

This 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.

4. First aid measures

First aid procedures

Eye

Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.

Skin

Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.

Inhalation

Move to fresh air. If symptoms persist, get medical attention.

Ingestion

If ingestion of a large amount does occur, seek medical attention.

5. Fire-fighting measures

Flash point and method

> 200 °F; Pensky-Martens Closed Cup

Hazardous combustion products

Refer to section 10.

Extinguishing media

CO₂, water, dry chemical, or foam

Unsuitable extinguishing media

None known.

Unusual fire and explosion hazard

None known.

Special firefighting procedures

None established.

6. Accidental release measures

Personal precautions

Wear appropriate personal protective equipment.

Environmental precautions

Do not let product enter drains. Do not flush into surface water or sanitary sewer system.



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Procedures if material is released or spilled.

Soak up with inert absorbent material. Slowly vacuum or sweep the material into a bag or other sealed container. Dispose of in compliance with federal, state, and local regulations. See also section 13 Disposal considerations.

7. Handling and storage

Handling	Avoid contact with skin, eyes and clothing.
Storage	Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls/personal protection

Exposure limit values	Exposure limits have not been established for this product.
Personal protective equipment	
General	Use personal protective equipment to minimize exposure to skin and eye.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Exposure guidelines	Use in a well ventilated area.

9. Physical and chemical properties

pH	6.5 - 8.75
Vapour pressure	Not determined
Boiling point	Not determined
Solubility	Soluble in water
Specific gravity	1 - 1.2
VOC content	< 3 %
Flash point	> 200 °F
Viscosity	> 2 cp
Vapour density	> 1 (Air = 1.0)
Evaporation rate	Not determined
Flammability	Not determined
Oxidising properties	Not determined.
Colour	Cyan, magenta, yellow

10. Stability and reactivity

Stability	Stable under recommended storage conditions.
Hazardous polymerisation	Will not occur.
Hazardous decomposition products	Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Incompatibility	Incompatible with strong bases and oxidizing agents.

11. Toxicological information

This ink formulation has not been tested for toxicological effects.
Refer to Section 3 for potential health effects and Section 4 for first aid measures.



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12. Ecological information

Aquatic toxicity

Cyan ink

LC50/96h/fathead minnows =< 400 mg/L
Static acute toxicity (trout), survival (100 mg/L) = 100%
Static acute toxicity (trout), survival (10 mg/L) = 100%

Magenta ink

LC50/96h/fathead minnows =< 400 mg/L
Static acute toxicity (trout), survival (100 mg/L) = 100%
Static acute toxicity (trout), survival (10 mg/L) = 100%

Yellow ink

LC50/96h/fathead minnows =< 400 mg/L
Static acute toxicity (trout), survival (100 mg/L) = 100%
Static acute toxicity (trout), survival (10 mg/L) = 100%

13. Disposal considerations

Disposal instructions

Dispose of in compliance with federal, state, and local regulations.
HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit <http://www.hp.com/recycle>.

14. Transport information

General

Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID.

IATA

Proper shipping name	Not applicable
Hazard class	Not applicable
Special precautions	None.
Packaging exceptions	None.
Identification number (UN)	None.
Packing group	N/A

15. Regulatory information

International regulations

All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

EU label

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

Risk phrases

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

16. Other information

Manufacturer information

Hewlett-Packard Company
1000 NE Circle Boulevard
Corvallis, OR 97330-4239 US



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Ingredient risk phrase definition(s)

R8 Contact with combustible material may cause fire.
R21/22 Harmful in contact with skin and if swallowed.
R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
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.
R52 Harmful to aquatic organisms.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other information

This MSDS was prepared in compliance with EU Directive 91/155/EEC as amended by 2001/58/EC.

Issue date

Jan 24 2007 9:11AM

Revision

4

Replaces sheet dated

Feb 7 2006 12:10PM

Preparation and revision information

15. Regulatory information: US federal regulations

Disclaimer

This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document 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. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

Explanation of abbreviations

ACGIH American Conference of Governmental Industrial Hygienists
CAS Chemical Abstracts Service
CERCLA Comprehensive Environmental Response Compensation and Liability Act
CFR Code of Federal Regulations
COC Cleveland Open Cup
DOT Department of Transportation
EPCRA Emergency Planning and Community Right-to-Know Act (aka SARA)
IARC International Agency for Research on Cancer
NIOSH National Institute for Occupational Safety and Health
NTP National Toxicology Program
OSHA Occupational Safety and Health Administration
PEL Permissible exposure limit
RCRA Resource Conservation and Recovery Act
REC Recommended
REL Recommended Exposure Limit
SARA Superfund Amendments and Reauthorization Act of 1986
STEL Short-Term Exposure Limit
TCLP Toxicity Characteristics Leaching Procedure
TLV Threshold Limit Value
TSCA Toxic Substances Control Act
VOC Volatile Organic Compounds