



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the preparation CZ110Series

Use of the substance/preparation Inkjet printing

Version No. 03

Revision date 20-Sep-2012

CAS # Mixture

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2. HAZARDS IDENTIFICATION

Emergency Overview Contact with skin and eyes may result in irritation.
Causes skin irritation.

Acute health effects

Skin contact

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

1,5-pentanediol

Contact with skin may result in irritation.

Aliphatic diol

Contact with skin may result in irritation.

Copper phthalocyanine direct dye salt

Contact with skin may result in irritation.

Ethyl alkyl diol

Contact with skin may result in mild irritation.

Metal nitrate #2

Contact with skin may result in irritation.

Substituted diol

Contact with skin may result in irritation.

Eye contact

1,5-pentanediol

Contact with eyes may result in irritation.

Aliphatic diol

Contact with eyes may result in irritation.

Copper phthalocyanine direct dye salt

Contact with eyes may result in irritation.

Risk of serious damage to eyes.

Ethyl alkyl diol

Contact with eyes may result in mild irritation.

Metal nitrate #2

Contact with eyes may result in irritation.

Substituted diol

Contact with eyes may result in irritation.

Inhalation

Aliphatic diol

Inhalation may result in respiratory irritation.

Metal nitrate #2

Inhalation may result in respiratory irritation.

Ingestion	<i>Metal nitrate #2</i> Contains nitrate salts, may cause methemoglobinemia.
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	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.
Other information	This blue ink is not classified according to EU Directive 1999/45/EC.
Classification	Not classified.
Physical hazards	Not classified as a physical hazard.
Health hazards	Not classified as a health hazard.
Environmental hazards	Not classified as an environmental hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
1,5-pentanediol	111-29-5	< 7.5	203-854-4	
Aliphatic diol	Proprietary	< 7.5	Proprietary	
Ethyl alkyl diol	Proprietary	< 7.5	Proprietary	
Copper phthalocyanine direct dye salt	Proprietary	< 5	Proprietary	Xi;R41, R52/53
Metal nitrate #2	Proprietary	< 5	Proprietary	O;R8, Xi;R36/37/38
Substituted diol	2163-42-0	< 5	412-350-5	
Water	7732-18-5	> 65	231-791-2	

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.
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4. FIRST-AID MEASURES

Inhalation	Remove to fresh air. If symptoms persist, get medical attention.
Skin contact	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
Eye contact	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.
Ingestion	If ingestion of a large amount does occur, seek medical attention.
General advice	No additional information

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Extinguishing media which must not be used for safety reasons	None known.
Unusual fire & explosion hazards	None known.
Specific methods	None established.
Hazardous combustion products	Refer to section 10.

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.

Containment procedures	Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.
Methods for cleaning up	Soak up with inert absorbent material.
Other information	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

Additional exposure data	Exposure limits have not been established for this product.
Exposure controls	Use in a well ventilated area.
Occupational exposure controls	
General	Use personal protective equipment to minimize exposure to skin and eye.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid.
Physical state	Liquid
Form	Not available.
Colour	Cyan
Odour	Not available.
Odour threshold	Not available.
pH	7 - 7.5
Boiling point	Not determined
Flash point	> 93.3 °C (> 200 °F) Pensky-Martens Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not determined
Vapour pressure	Not determined
Relative density	Not available.
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not available
Viscosity	Not available.
Vapour density	Not available.
Evaporation rate	Not determined
Melting point	Not available.
Freezing point	Not available.
Auto-ignition temperature	Not determined
Specific gravity	Not determined
VOC	< 269 g/l

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Serious eye damage/eye irritation	Not available.
Further information	This ink formulation has not been tested for toxicological effects. Refer to Section 2 for potential health effects and Section 4 for first aide measures.

12. ECOLOGICAL INFORMATION

Aquatic toxicity	EC50/72h/algae =>100 gm/l
	EC50/48h/daphnia =>100 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Dispose of in compliance with federal, state, and local regulations.
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14. TRANSPORT INFORMATION

Further information	Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.
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ADR

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

Labeling

Contains	1,5-pentanediol, Aliphatic diol, Copper phthalocyanine direct dye salt, Ethyl alkyl diol, Metal nitrate #2, Substituted diol, Water
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EC label	This product does not require a label according to EU Directive 1999/45/EC.
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S-phrases(s)	S2 Keep out of the reach of children.
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Regulatory information	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.
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16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3	R8 Contact with combustible material may cause fire. R36/37/38 Irritating to eyes, respiratory system and skin. R41 Risk of serious damage to eyes. 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.
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.
Issue date	20-Sep-2012
This data sheet contains changes from the previous version in section(s):	ECOLOGICAL INFORMATION: Ecotoxicity ECOLOGICAL INFORMATION: Aquatic toxicity REGULATORY INFORMATION: Other information
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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: <value>	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds