



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Identification of the preparation	CH144Series
Synonym(s)	HP SC100 Black Ink
Product use	Inkjet printing
Version #	03
Revision date	13-Mar-2013
CAS #	Mixture
Company identification	Hewlett-Packard Company 3000 Hanover Street Palo Alto, CA 94304-1185 United States Telephone 650-857-1501 Hewlett-Packard health effects line (Toll-free within the US) 1-800-457-4209 (Direct) 1-503-494-7199 HP Customer Care Line (Toll-free within the US) 1-800-474-6836 (Direct) 1-208-323-2551 Email: hpcustomer.inquiries@hp.com

2. Hazards Identification

Emergency overview	Harmful by inhalation and in contact with skin. Contact with skin and eyes may result in irritation. Inhalation may result in respiratory irritation.
Acute health effects	
Skin contact	Avoid contact with skin. Harmful in contact with skin. <i>Ethylene Glycol, Monobutyl Ether Acetate</i> Contact with skin may result in irritation. Harmful if absorbed through the skin.
Eye contact	Avoid contact with eyes. Contact with eyes may result in irritation. Contact with eyes may result in irritation. <i>Ethylene Glycol, Monobutyl Ether Acetate</i> Contact with eyes may result in irritation. <i>Propylene Glycol Monomethyl Ether Acetate</i> Contact with eyes may result in irritation.
Inhalation	Avoid breathing vapors or mists of this product. Harmful if inhaled. <i>Ethylene Glycol, Monobutyl Ether Acetate</i> Inhalation may result in respiratory irritation.
Ingestion	May be harmful if swallowed. <i>Ethylene Glycol, Monobutyl Ether Acetate</i> Swallowing large amounts may cause digestive discomfort. Harmful if swallowed.
Potential health effects	
Routes of exposure	Potential routes of exposure under normal use conditions are skin and eye contact; and inhalation
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.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol, Monobutyl Ether Acetate	112-07-2	< 50
Propylene Glycol Monomethyl Ether Acetate	108-65-6	< 10
2-(2-ethoxyethoxy)ethyl Acetate	112-15-2	< 25
Cyclohexanone	108-94-1	< 10

4. First Aid Measures

First aid procedures

Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.
Skin contact	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Wash clothing separately before reuse. Get medical attention, if needed.
Inhalation	Move person to fresh air immediately. If symptoms persist, get immediate medical attention.
Ingestion	Rinse mouth out with water. If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

General advice No additional information

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide.
For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

Protection of firefighters

Protective equipment and precautions for firefighters Move containers from fire area if you can do it without risk.
Avoid runoff into storm sewers and ditches which lead to waterways.

Special protective equipment for fire-fighters Firefighters should wear full protective clothing including self contained breathing apparatus.

6. Accidental Release Measures

Personal precautions Avoid contact with skin. Avoid inhalation of vapors or mists.
Do not touch or walk through spilled material. Ensure adequate ventilation. Remove all sources of ignition.
Use personal protective equipment to minimize exposure to skin and eye. In the case of vapor formation use a respirator with an approved filter.

Environmental precautions Do not flush into surface water or sanitary sewer system.

Methods for cleaning up Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Other information Dispose of in compliance with federal, state, and local regulations.

7. Handling and Storage

Handling Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product.
Use with adequate ventilation.
Wear personal protective equipment.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value
Cyclohexanone (108-94-1)	BEI	80.0000 mg/l

Components	Type	Value
Ethylene Glycol, Monobutyl Ether Acetate (112-07-2)		8.0000 mg/l
	STEL	50.0000 ppm
	TWA	20.0000 ppm
	TWA	20.0000 ppm

U.S. - OSHA

Components	Type	Value
Cyclohexanone (108-94-1)	PEL	50.0000 ppm
		200.0000 mg/m3

U.S. - Tennessee

Components	Type	Value
Cyclohexanone (108-94-1)	TWA	25.0000 ppm
		100.0000 mg/m3

U.S. - WEEL

Components	Type	Value
Propylene Glycol Monomethyl Ether Acetate (108-65-6)	TWA	50.0000 ppm

Exposure guidelines

US. ACGIH Threshold Limit Values

Cyclohexanone (CAS 108-94-1)

Can be absorbed through the skin.

Personal protective equipment

Eye / face protection	Wear safety glasses; chemical goggles (if splashing is possible). Eye wash fountain and emergency showers are recommended.
Skin protection	Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.
Respiratory protection	Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.
General hygiene considerations	Do not get this material in contact with skin. Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Launder contaminated clothing before reuse.

9. Physical & Chemical Properties

Appearance	Not available.
Color	Black.
Odor	Solvent.
Odor threshold	Not available.
Physical state	Liquid
Form	Liquid.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	154.4 °F (68 °C) Closed Cup
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.

Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Relative density	Not available.
Solubility (water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	770 g/L
Other information	For other VOC regulatory data/information see section 15.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Possibility of hazardous reactions	None known.

11. Toxicological Information

Carcinogenicity

ACGIH Carcinogens

Cyclohexanone (CAS 108-94-1)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)	A3 Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cyclohexanone (CAS 108-94-1)	3 Not classifiable as to carcinogenicity to humans.
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IARC Monographs: Evidence of carcinogenicity in humans

Cyclohexanone (CAS 108-94-1)	No data.
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Serious eye damage/eye irritation Not available.

Sensitization

US. ACGIH Threshold Limit Values

Cyclohexanone (CAS 108-94-1)	Can be absorbed through the skin.
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Symptoms and target organs

Target Organs (NIOSH)

Cyclohexanone (CAS 108-94-1)	Central Nervous System Eyes Kidneys Liver Respiratory system Skin
Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)	Blood Central Nervous System Eyes Hemato system Kidneys Liver Lymphoid system Respiratory system Skin

Further information Complete toxicity data are not available for this specific formulation

12. Ecological Information

Ecotoxicity	No information available.
Aquatic toxicity	No information available.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions Do not dispose of together with general office waste.
Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
Ensure collection and disposal with an appropriately licensed waste contractor.

14. Transport Information

DOT

Basic shipping requirements:

UN number NA1993
Proper shipping name Combustible liquid n.o.s. (2-methoxy-1-methylethyl acetate, cyclohexanone) -Not regulated in quantities less than 119 gallons
Hazard class Combustible
Packing group III
Additional information:
ERG number 128

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations US EPA TSCA Inventory: All chemical substances in this product comply with all rules or orders under TSCA.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Not listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA (Superfund) reportable quantity

None

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

State regulations

US - New Jersey RTK - Substances: Listed substance

Cyclohexanone (CAS 108-94-1) Listed.
Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2) Listed.

US. Massachusetts RTK - Substance List

Cyclohexanone (CAS 108-94-1)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Cyclohexanone (CAS 108-94-1)

Listed.

US. Rhode Island RTK

Cyclohexanone (CAS 108-94-1)

Regulatory information

Notified according to EU Regulations.

Other information

Exposure Limits (See Section 8): Executive regulation of Minister of Labour and Social Policy dated Nov. 29, 2002 concerning the highest exposure limits and volume of factors harmful for health and environment at work (Official Journal of Laws no 217/2002 item 1833 with further amendments).
VOC content (less water, less exempt compounds) = < 770 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)

16. Other Information**Other information**

This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).

HMIS® ratings

Health: 2
Flammability: 2
Physical hazard: 1
Personal protection: B

NFPA ratings

Health: 2
Flammability: 2
Instability: 1

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

13-Mar-2013

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients
15. Regulatory Information: Other information

Manufacturer information

Hewlett-Packard Company
3000 Hanover Street
Palo Alto, California 94304-1112 US
Product Information 1-800-925-0563

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