MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name CH143Series

Version # 03

Issue date 02-May-2012

Revision date 01-Oct-2013

Product use Inkjet printing

CAS # Mixture

Synonym(s) HP SC100 Yellow Ink

Company identification

Hewlett-Packard Company
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Palo Alto, CA 94304-1185
United States
Telephone 650-857-5020

Hewlett-Packard health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 760-710-0048
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.

Potential health effects

Eyes

Avoid contact with eyes. Contact with eyes may result in irritation.

Skin

Avoid contact with skin.
Harmful in contact with skin. Contact with skin may result in irritation and Harmful if absorbed through the skin.

Inhalation

Avoid breathing vapors or mists of this product.
Harmful if inhaled. Inhalation may result in respiratory irritation.

Ingestion

May be harmful if swallowed. Swallowing large amounts may cause digestive discomfort. Harmful if swallowed.

Other hazards

Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol, Monobutyl Ether Acetate	112-07-2	<90
Cyclohexanone	108-94-1	<10
Propylene Glycol Monomethyl Ether Acetate	108-65-6	<10

4. First Aid Measures

General advice No information

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.

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	Firefighters should wear full protective clothing including self contained breathing apparatus. Avoid runoff into storm sewers and ditches which lead to waterways.
Fire fighting equipment/instructions	Move containers from fire area if you can do it without risk.

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

US. ACGIH Threshold Limit Values

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	STEL	50 ppm
	TWA	20 ppm
Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)	TWA	20 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	PEL	200 mg/m3
		50 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	100 mg/m3
		25 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)	TWA	33 mg/m3
		5 ppm

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Propylene Glycol Monomethyl Ether Acetate (CAS 108-65-6)	TWA	50 ppm

US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	100 mg/m3
		25 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.
Physical state	Not available.
Form	Liquid.
Color	Yellow.
Odor	Solvent.
pH	Not available.
Vapor pressure	Not available.
Boiling point	Not available.
Melting point/Freezing point	Not available.
Solubility (water)	0.5 g/g
Specific gravity	Not available.
Flash point	154.40 °F (68.00 °C) Closed Cup
Viscosity	5 - 15 cP
VOC	899 g/L
Other information	No information available

Other data

Chemical family Glycol Ether/Polymer/Pigment Blend

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Not available.

Hazardous decomposition products Not available.

Possibility of hazardous reactions None known.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Ethylene Glycol, Monobutyl Ether Acetate (CAS 112-07-2)		
Acute		
Dermal		
LD50	Rabbit	1500 mg/kg
Oral		
LD50	Rat	2400 mg/kg
Other		
LD50	Mouse	754 mg/kg

Carcinogenicity

ACGIH Carcinogens

2-BUTOXYETHYL ACETATE (EGBEA) (CAS 112-07-2)	A3 Confirmed animal carcinogen with unknown relevance to humans.
CYCLOHEXANONE (CAS 108-94-1)	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.

Serious eye damage/eye irritation Not available.

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

12. Ecological Information

Aquatic toxicity No information available.

Ecotoxicological data

Components		Species	Test Results
Cyclohexanone (CAS 108-94-1)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	481 - 578 mg/l, 96 hours

Ecotoxicity No information available.

Persistence and degradability Not available.

Bioaccumulation / Accumulation

Bioaccumulative potential

Octanol/water partition coefficient log Kow

Cyclohexanone	0.81

Partition coefficient

Cyclohexanone	0.81

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

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.

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

Not listed.

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

Not regulated.

DEA Exempt Chemical Mixtures Code Number

Not regulated.

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

Not regulated.

CERCLA (Superfund) reportable quantity

Cyclohexanone: 5000

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
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

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) = < 899 g/L (U.S. requirement, not for emissions) VOC data based on formulation (Organic compounds minus solids)

Other regulations Notified according to EU Regulations.

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. Pennsylvania RTK - Hazardous Substances

Cyclohexanone (CAS 108-94-1)	Listed.

US. Rhode Island RTK

Cyclohexanone (CAS 108-94-1)

16. Other Information

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.
Other information	This MSDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).
Issue date	02-May-2012
This data sheet contains changes from the previous version in section(s):	Hazards Identification: Eyes Hazards Identification: Other hazards 5. Fire Fighting Measures: Protective equipment and precautions for firefighters GHS: Classification
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