



1. Chemical and company identification

Important information	*** This Safety Data Sheet is only authorised for use by HP for HP Original products. Any unauthorised use of this Safety Data Sheet is strictly prohibited and may result in legal action being taken by HP. ***
Name of chemical (Product name)	CN988 Series
	HP Japan Inc. 4F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711
Poison Information Centre Telephone	0120-50-3024 (+81) 3 5749-8363
HP Inc. health effects line (Toll-free within the US) (Direct)	1-800-457-4209 1-760-710-0048
HP Inc. Customer Care Line (Toll-free within the US) (Direct)	1-800-474-6836 1-208-323-2551
Email:	hpcustomer.inquiries@hp.com
Recommended use of the chemical and restrictions on use	
Intended use	Inkjet printing.

2. Hazards identification

GHS classification	
Physical hazards	The product is not classified according to GHS.
Health hazards	Acute toxicity, dermal Category 4 Acute toxicity, inhalation Category 4 Serious eye damage/eye irritation Category 1
Environmental hazards	The product is not classified according to GHS.
GHS label elements	
Symbols	
Signal words	Danger
Hazard statement	Harmful if inhaled. Causes serious eye damage. Harmful in contact with skin.
Precautionary statement	
Prevention	Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
Response	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor if you feel unwell. Take off contaminated clothing and wash it before reuse.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards which do not result in classification	Potential routes of exposure to this product are skin and eye contact, ingestion, and inhalation.
Supplemental information	None.

3. Composition/information on ingredients

Substance or mixture	Mixture
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Components	CAS Number	Gazette notification		
		ENCS no.	ISHL no.	Concentration (%)
2-Butoxyethyl acetate	112-07-2	(2)-740	(2)-740	<80
2-methoxy-1-methylethylacetate	Proprietary	(2)-3144	(2)-3144	<20
Cyclohexanone	108-94-1	(3)-2376	(3)-2376	<5
Yellow pigment	Proprietary	Proprietary	Proprietary	<1

Synonym(s)	HP Scitex TJ100 Flash Yellow Ink
Chemical formula	C8-H16-O3 (112-07-2), C8-H16-O3 (112-07-2), C6-H10-O (108-94-1), C6-H10-O (108-94-1)

4. First aid measures

If inhaled	Move person to fresh air immediately. If symptoms persist, get immediate medical attention.
If on skin	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.
If in eyes	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.
If swallowed	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: sand, carbon dioxide (CO ₂), and dry chemical.
Extinguishing media to avoid	None.
Special fire fighting procedures	Move containers from fire area if you can do it without risk.
Protection of fire-fighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Avoid runoff into storm sewers and ditches which lead to waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	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 or materials for containment and cleaning up	Not available.

7. Handling and storage

Handling	
Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Use this product with adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product.
Hygiene measures	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.
Storage	
Safe storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.
Safe packaging materials	Not available.

8. Exposure controls/personal protection

Occupational exposure limits

Japan. OELs - ISHL. (Workplace Environment Assessment Standards)

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TLV	20 ppm

Japan. OELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits)

Components	Type	Value
Cyclohexanone (CAS 108-94-1)	TWA	100 mg/m ³
		25 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2-Butoxyethyl acetate (CAS 112-07-2)	TWA	20 ppm
Cyclohexanone (CAS 108-94-1)	STEL	50 ppm
	TWA	20 ppm

Biological limit values

Japan. BELs - JSOH (Japan Society of Occupational Health: Recommendation of Occupational Exposure Limits Based on Biological Monitoring)

Components	Value	Determinant	Specimen	Sampling Time
2-Butoxyethyl acetate (CAS 112-07-2)	200 mg/g	Butoxyacetic acid	Creatinine in urine	*

* - For sampling details, please see the source document.

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cyclohexanone (CAS 108-94-1)	80 mg/l	1,2-Cyclohexanediol, with hydrolysis	Urine	*
	8 mg/l	Cyclohexanol, with hydrolysis	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

Cyclohexanone (CAS 108-94-1) Can be absorbed through the skin.

Personal protective equipment

Respiratory protection Provide adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection Recommended gloves: Nitrile 6 mil minimum thickness.

Hygiene measures

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.

Personal protective equipment

Eye protection Wear safety glasses; chemical goggles (if splashing is possible). Eye wash fountain and emergency showers are recommended.

Skin and body protection Wear appropriate chemical resistant clothing.

9. Physical and chemical properties

Appearance

Physical state Not available.

Form Liquid.

Color Yellow

Odor Solvent.

pH 5.8 - 6.2 Metler Toledo pH Meter

Melting point/Freezing point Not available.

Boiling point, initial boiling point, and boiling range Not available.

Flash point >= 149.0 °F (>= 65.0 °C) Closed Cup EPA Method 1020

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity (Coefficient of viscosity)	13 - 14 cP Brookfield Viscometer T 22C Spindle #18 (S18) RPM 100
Other information	
VOC	< 878 g/L Calculated

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	None known.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None.
Hazardous decomposition products	None.

11. Toxicological information

Acute toxicity Harmful if inhaled. Harmful in contact with skin.

Components	Species	Test Results
Cyclohexanone (CAS 108-94-1)		
<u>Acute</u>		
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 6.2 mg/l, 4 Hours
Skin corrosion/irritation	Based on available data, the classification criteria are not met.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	Based on available data, the classification criteria are not met.	
Carcinogenicity	Based on available data, the classification criteria are not met.	
ACGIH Carcinogens		
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.
Reproductive toxicity	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.	
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.	
Aspiration hazard	Based on available data, the classification criteria are not met.	
Other information	Complete toxicity data are not available for this specific formulation.	

12. Ecological information

Ecotoxicity	Not available.
Persistence and degradability	Not available.

Bioaccumulation	Not available.
Bioaccumulative potential	
Octanol/water partition coefficient log Kow	
Cyclohexanone	0.81
Mobility in soil	Not available.
Hazardous to the ozone layer	Not available.

13. Disposal considerations

Local disposal regulations	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.
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14. Transport information

DOT	
UN number	NA1993
UN proper shipping name	Combustible liquid n.o.s. (2-methoxy-1-methylethyl acetate) -Not regulated in quantities less than 119 gallons
Transport hazard class(es)	
Class	Combustible
Subsidiary risk	-
Packing group	III
Special precautions for user	Not available.
DOT Supplemental Information	DOT Classification only applies to shipments within the US and Puerto Rico.
IATA	
UN number	Not available.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	No.
Special precautions for user	Not available.
IMDG	
UN number	Not available.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not available.
Transport hazard class(es)	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Not available.
ADR	
UN number	Not available.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Hazard No. (ADR)	Not available.
Tunnel restriction code	Not available.
Packing group	Not available.
Environmental hazards	No.
Special precautions for user	Not available.
Emergency Response Guide Number	128
Further information	Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

15. Regulatory information

Industrial Safety and Health Act
Organic solvent regulation
Class 2 organic solvents
CYCLOHEXANONE

Notifiable substances

2-Butoxyethyl acetate	0 - 80 %
CYCLOHEXANONE	Table 9 Ordinance No. 231 0 - 5.0 %

Labeling substances

2-Butoxyethyl acetate	0 - 80 %
CYCLOHEXANONE	0 - 5.0 %

Poisonous and Deleterious Substances Control Act**Specified poisonous substances**

Not regulated.

Poisonous substances

Not regulated.

Deleterious substances

Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.**Class I specified chemical substances**

Not regulated.

Class II specified chemical substances

Not regulated.

Monitoring chemical substances

Not regulated.

Priority Assessment Chemical Substances (PACs)

2-BUTOXYETHYL ACETATE
CYCLOHEXANONE

Reporting Exempted Substances

Not regulated.

Law concerning Pollutant Release and Transfer Register**Specified class 1 substances (substance name, ordinance number and content)**

Not regulated.

Class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 2 substances (substance name, ordinance number and content)

Not regulated.

Fire Service Act

Class 4 Group 2 oils (Non-water soluble) Hazard rank III

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule

Not regulated.

Air Law, Enforcement Rule

Not regulated.

Explosives Control Act

Not regulated.

Act on Prevention of Marine Pollution and Maritime Disaster

ETHYLENE GLYCOL MONOBUTYL ETHER ACETATE	Category: Y
CYCLOHEXANONE	Category: Z

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.

16. Other information

This Safety Data Sheet document is provided without charge to customers of HP. Data is the most current known to HP 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.

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Revision information

3. Composition / Information on Ingredients: Disclosure Overrides

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