



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)	C4872Series
	HP Japan Inc. 5F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711
Poison Information Centre Telephone	0120-50-3024 (+81) 3 5628-1101
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	Serious eye damage/eye irritation Category 1 Reproductive toxicity (fertility, the unborn child) Category 1B
Environmental hazards	Hazardous to the aquatic environment, long-term hazard Category 3
GHS label elements	
Symbols	
Signal words	Danger
Hazard statement	Causes serious eye damage. May damage fertility or the unborn child. Harmful to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Wear protective gloves/protective clothing/eye protection. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Avoid release to the environment.
Response	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 or doctor/physician. IF exposed or concerned: Get medical advice/attention.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards which do not result in classification	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.
Supplemental information	2-pyrrolidone: Specific Concentration Limits, Reproductive toxicity Category 1B, fertility or the unborn child 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11.

3. Composition/information on ingredients

Substance or mixture	Mixture	Gazette notification			
		CAS Number	ENCS no.	ISHL no.	Concentration (%)
Water		7732-18-5	(9)-447		60-80
2-pyrrolidone		616-45-5	(5)-112	(5)-112	<10
Trimethylolpropane		77-99-6	(2)-245	(2)-245	<10
succinic acid		110-15-6	(2)-846	(2)-846	<7.5
C11-C15 secondary ethoxylated alcohols		Proprietary	(7)-97	(7)-97	<2.5
Direct Blue 199 Tetramethylammonium Salt		Proprietary	(5)-1317	(5)-1317	<2.5

Chemical formula	H2O (7732-18-5), C4-H7-N-O (616-45-5), C4-H7-N-O (616-45-5), C6-H14-O3 (77-99-6), C6-H14-O3 (77-99-6), C4-H6-O4 (110-15-6), C4-H6-O4 (110-15-6)
Composition comments	2-pyrrolidone: Specific Concentration Limit 3%. Mixture classification threshold based on data related to developmental toxicity in animals. No adverse effects on sexual function or damage to fertility have been observed in an animal study. See Section 11. This ink supply contains an aqueous ink formulation.

4. First aid measures

If inhaled	Move to fresh air. If symptoms persist, get medical attention.
If on skin	Wash affected areas thoroughly with mild soap and water. If irritation persists get medical attention.
If in eyes	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.
If swallowed	If ingestion of a large amount does occur, seek medical attention.

5. Fire-fighting measures

Extinguishing media	CO2, water, dry chemical, or foam
Extinguishing media to avoid	None known.
Specific methods	None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency measures	Wear appropriate personal protective equipment.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods or materials for containment and cleaning up	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.

7. Handling and storage

Handling	
Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Storage	
Safe storage conditions	Keep out of the reach of children. Keep away from excessive heat or cold.
Safe packaging materials	Not available.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
Engineering measures	Use in a well ventilated area. Provide adequate ventilation.
Personal protective equipment	
Respiratory protection	Not available.
Hand protection	Recommended gloves: Nitrile 4 mil minimum thickness.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Personal protective equipment

Eye protection	Not available.
Skin and body protection	Use personal protective equipment to minimize exposure to skin and eye.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Cyan

Odor Not available.

pH 3.8 - 4.3

Melting point/Freezing point Not available.

Boiling point, initial boiling point, and boiling range Not determined

Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not determined

Vapor density Not available.

Evaporation rate Not determined

Specific gravity Not available.

Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity (Coefficient of viscosity) ≥ 2 cp

Other information

Oxidizing properties Not determined

Percent volatile 10 % estimated

VOC < 221 g/l Estimated

10. Stability and reactivity

Reactivity Not available.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous reactions Will not occur.

Conditions to avoid None.

Incompatible materials Incompatible with strong bases and oxidizing agents.

Hazardous decomposition products Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Acute toxicity Based on available data, the classification criteria are not met.

Components	Species	Test Results
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2-pyrrolidone (CAS 616-45-5)

Acute

Oral

LD50	Rat	> 5000 mg/kg
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Skin corrosion/irritation Based on available data, the classification criteria are not met.
Non irritant in rabbit (OECD 404)

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.
Reproductive toxicity	May damage fertility or the unborn child.
	2-pyrrolidone: This component showed developmental effects only at high doses that were toxic to pregnant test animals (OECD Testing Guideline 414: Prenatal Developmental Toxicity Study). Uptake by people of small doses is not expected to cause developmental toxicity. This component has not caused adverse effects on sexual function or damage to fertility in an animal study (OECD Testing Guideline 443: Extended One-Generation Reproductive Toxicity Study).
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 Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Ecological information

Aquatic toxicity	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Static acute toxicity (trout), survival (100 mg/L) = 90% Static acute toxicity (trout), survival (10 mg/L) = 100%
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Ecotoxicological data

Product		Species	Test Results
C4872Series			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	> 100 mg/l, 72 hours
Crustacea	EC50	Daphnia	> 66 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>)	< 400 mg/l, 96 hours
Components			
2-pyrrolidone (CAS 616-45-5)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>)	13.21 mg/l, 48 hours
Direct Blue 199 Tetramethylammonium Salt			
Aquatic			
Crustacea	EC50	Daphnia	50 - 100 mg/l, 48 Hours
succinic acid (CAS 110-15-6)			
Aquatic			
Fish	LC50	Fish	101, 96 Hours
Trimethylolpropane (CAS 77-99-6)			
Aquatic			
Crustacea	EC50	Daphnia	102, 48 Hours
Fish	LC50	Fish	1000, 96 Hours
Ecotoxicity	Not available.		
Persistence and degradability	Not available.		
Bioaccumulation	Not available.		
Bioaccumulative potential			
Octanol/water partition coefficient log Kow			
2-pyrrolidone		-0.85	
succinic acid		-0.59	
Mobility in soil	Not available.		
Hazardous to the ozone layer	Not available.		

13. Disposal considerations

Local disposal regulations	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental 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 .
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14. Transport information

DOT

UN number	Not available.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not available.
Subsidiary risk	-
Packing group	Not available.
Special precautions for user	Not available.

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.

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

Transport in bulk according to Annex II of MARPOL73/78 and the IBC code: Not applicable.

15. Regulatory information

Industrial Safety and Health Act

Notifiable substances	Not regulated.
Labeling substances	Not regulated.

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)

Not regulated.

Reporting Exempted Substances

Butanedioic acid

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 3 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

WATER

Category: Other Substances

Ethyl alkyldiol

Category: Y

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 is meant to convey information about HP inks (toners) provided in HP Original ink (toner) supplies. If our Safety Data Sheet has been provided to you with a refilled, remanufactured, compatible or other non-HP Original supply please be aware that the information contained herein was not meant to convey information about such products and there could be considerable differences from information in this document and the safety information for the product you purchased. Please contact the seller of the refilled, remanufactured or compatible supplies for applicable information, including information on personal protective equipment, exposure risks and safe handling guidance. HP does not accept refilled, remanufactured or compatible supplies in our recycling programs. 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.

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