



SAFETY DATA SHEET

1. 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 the substance or mixture (trade name)	C4993Series	
Major recommended uses for the substance or mixture	Inkjet printing	
Specific restrictions for use of the substance or mixture	Not available.	
Manufacturer/Importer/Distributor information		
Company identification	HP Colombia SAS Carrera 7 No 99-53 Torre B Pisos 7 Bogota, Colombia	
Telephone	(57) 1 639 0000	
HP Inc. health effects line		
(Toll-free within the US)	1-800-457-4209	
(Direct)	1-760-710-0048	
HP Inc. 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

Classification of the substance or mixture

Physical hazards	Not classified.	
Health hazards	Reproductive toxicity (fertility, the unborn child)	Category 1B
Environmental hazards	Not classified.	

GHS labeling elements, including precautionary statements

Hazard symbol(s)



Signal word	Danger
Hazard statement(s)	May damage fertility or the unborn child.
Precautionary statement(s)	

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.
Response	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

Complete toxicity data are not available for this specific formulation.

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.

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.
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3. Composition/information on ingredients

Mixture

Common chemical name or technical name	CAS number	Concentration or concentration range
Water	7732-18-5	80-90
Aliphatic diol	Proprietary	<10
2-pyrrolidone	616-45-5	<5
Substituted naphthalenesulfonate salt # 7	Proprietary	<2.5

Composition comments	This ink supply contains an aqueous ink formulation. 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.
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4. First-aid measures

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.
Most important symptoms/effects, acute and delayed	Not available.
Notes to physician	Not available.

5. Fire-fighting measures

Means of fire extinguishing

Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not available.
Protective measures taken by firefighting crews	Not available.
Specific methods	None established.

6. Control measures for spills and leaks

Personal precautions, protective equipment and emergency procedures

To be taken by those who are not involved in rendering emergency services	Wear appropriate personal protective equipment.
To be taken by those who are involved in rendering emergency services	Not available.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods and 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.
Other issues relating to spills and releases	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

Precautions for safe handling	Avoid contact with skin, eyes and clothing.
Conditions for safe storage, including any incompatibilities	Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls/personal protection

Control parameters	
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
Appropriate engineering controls	Use in a well ventilated area. Provide adequate ventilation.
Personal protective measures	
Eyes and face protection	Not available.
Skin protection	
Hand protection	Not available.
Other	Use personal protective equipment to minimize exposure to skin and eye.
Respiratory protection	Not available.
Thermal hazards	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Not available.
Color	Cyan
Odor	Not available.
Odor threshold	Not available.
pH	7 - 8
Melting point/freezing point	Not available.
Initial boiling point and boiling temperature range	Not determined
Flash point	> 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup
Evaporation rate	Not determined
Flammability (solid, gas)	Not available.
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	>= 1 (air = 1.0)
Solubility(ies)	
Solubility (water)	Soluble in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other physical and chemical parameters	
Oxidizing properties	Not determined
Percent volatile	4 % estimated

VOC < 142 g/l

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	Not available.
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

Information on likely routes of exposure

Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Ingestion	Not available.
Symptoms	Not available.

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 irritation and corrosion Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

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.

Toxic to reproduction 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

12. Ecological information

Ecotoxicity

Product	Species	Test Results
C4993Series		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (Pimephales promelas) > 750 mg/l, 96 hours

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex)
		13.21 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulative potential		
Partition coefficient n-octanol / water (log Kow)		
2-pyrrolidone		-0.85
Aliphatic diol		-0.106
Bioconcentration factor (BCF)	Not available.	
Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Considerations on final disposal

Recommended methods for final destination

Residual waste	Not available.
Contaminated packaging	Not available.
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.

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.
Environmental hazards	
Marine pollutant	No
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

Federal regulations

Colombia. Controlled Substances (Resolution No. 009 of 1987 nationally regulating the transport & use of substances in subparagraph. f) of article 20 of Law 30 of 1986, as amended)

Not listed.

Venezuela. Chemical Precursors (Official Gazette No. 34.741, List I & II)

Not regulated.

International regulations

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.

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections Not available.

Revision information

1. Product and Company Identification: Alternate Trade Names
Hazards identification: Supplemental information
Composition/information on ingredients: Composition comments
Toxicological information: Reproductivity

Disclaimer

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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	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds