



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. ***
Product identifier	CN050Series
Other means of identification	None.
Recommended use	Inkjet printing
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	HP Inc. 1501 Page Mill Road Palo Alto, CA 94304-1112 United States
Telephone	650-857-1501
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:	sustainability@hp.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	Not available.
Precautionary statement	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
Hazard(s) not otherwise classified (HNOC)	None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA. 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	This product is not classified as hazardous according to OSHA CFR 1910.1200 (HazCom 2012). 2-pyrrolidone: OSHA Hazard Communication Standard cut-off value, 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

Substances

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	75-85
Hydroxy alkylated lactam*		Proprietary*	<15
Aliphatic diol		Proprietary	<5
Cyan colorant*		Proprietary*	<5
2-pyrrolidone		616-45-5	<3
2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated		9014-85-1	<1

Composition comments

This ink supply contains an aqueous ink formulation.
This product has been evaluated using criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard).

2-pyrrolidone: OSHA Hazard Communication Standard cut-off value 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.

*Proprietary

4. First-aid measures

Inhalation	Move 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.
General information	Wash affected areas thoroughly with mild soap and water.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Not available.
Specific methods	None established.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate personal protective equipment.
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.
Environmental precautions	Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

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

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Aliphatic diol	TWA	10 mg/m ³

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.

Individual protection measures, such as personal protective equipment

Eye/face protection Not available.

Skin protection

Hand protection Not available.

Other Not available.

Respiratory protection Not available.

Thermal hazards Not available.

General hygiene considerations 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 8.5 - 9.5

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point >212.0 °F (>100.0 °C) Pensky-Martens Closed Cup US EPA Method 1020

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Relative vapor density 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 3.2 - 3.3 cP

Other information For other VOC regulatory data/information see Section 15.

Density 1.04 g/cm³

Specific gravity 1.044 estimated

VOC <291 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	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Contact with skin may result in mild irritation.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

Information on toxicological effects

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

Components	Species	Test Results
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2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated (CAS 9014-85-1)

Acute

Inhalation

LC50	Rat	20 mg/l, 1 h Dusts, mists and fumes. The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
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Oral

LD50	Rat	6300 mg/kg
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2-pyrrolidone (CAS 616-45-5)

Acute

Oral

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

Irritation Corrosion - Skin

2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated	Not irritating, The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Test Duration: 24 h
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Serious eye damage/eye irritation Not classified as an irritant according to, OECD 405. Based on available data, the classification criteria are not met.

Eye

2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated	Risk of serious damage to eyes, The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). Species: Rabbit
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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.

Sensitization

2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated	May cause sensitization by skin contact.
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Germ cell mutagenicity Based on available data, the classification criteria are not met.

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

Carcinogenicity

2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated

Ames (OECD 471), Chromosomal aberration (OECD 473), gene mutation (OECD 476), negative. The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

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

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.

Further 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**Ecotoxicity**

This product is highly soluble in water.

Components	Species	Test Results
2,4,7,9-Tetramethyl-5-decyne-4,7-diol, ethoxylated (CAS 9014-85-1)		
<i>Acute</i>		
LC50	Scophthalmus maximus (turbot)	52 mg/l, 96 h
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna
		88 mg/l, 48 h The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). (OECD 202)
	LC50	Acartia tonsa
	LC50	Pimephales promelas
		166 mg/l, 48 h
		36 mg/l, 96 h The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). (OECD 203)
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia pulex)
		13.21 mg/l, 48 hours
Persistence and degradability	Not available.	
Bioaccumulative potential	Not available.	
Partition coefficient n-octanol / water (log Kow)		
2-pyrrolidone		-0.85
Aliphatic diol		-0.106
Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Disposal considerations

Disposal instructions	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 regulated as dangerous goods.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
Packing group	Not assigned.
Environmental hazards	
Marine pollutant	No
Special precautions for user	Not assigned.

IATA

UN number	Not regulated as dangerous goods.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not assigned
Subsidiary risk	-
Packing group	Not assigned
Environmental hazards	No
Special precautions for user	Not assigned

IMDG

UN number	Not regulated as dangerous goods.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not assigned.
Subsidiary risk	-
Packing group	Not assigned.
Transport hazard class(es)	
Marine pollutant	No
EmS	Not assigned.
Special precautions for user	Not assigned.

ADR

UN number	Not regulated as dangerous goods.
UN proper shipping name	Not Regulated
Transport hazard class(es)	
Class	Not assigned
Subsidiary risk	-
Hazard No. (ADR)	Not assigned
Tunnel restriction code	Not assigned
Packing group	Not assigned
Environmental hazards	No
Soecial precautions for user	Not assigned

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

US federal regulations US TSCA 12(b): Does not contain listed chemicals.

Toxic Substances Control Act (TSCA)

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical No**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

No intentionally added HAP substances.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**Other information**

VOC content (less water, less exempt compounds) = 1148 g/L (U.S. requirement, not for emissions)

VOC data based on formulation (Organic compounds minus solids)

Regulatory information

HP complies with chemical regulatory requirements in chemical substance notification laws, where applicable. All chemical substances are notified or exempt from notification or listed in the inventory as existing substances in the following countries: US (TSCA), Canada (DSL/NDSL), Australia (AICIS), Japan (ISHL, ENCS), Philippines (PICCS), New Zealand (NZIoC) and China (IECSC). For guidance on importation and/or additional requirements for registration schemes such as EAEU, EU, South Korea, Turkey, UK, India and Taiwan, please contact the Sustainability and Compliance Center (sustainability@hp.com).

Clean Air Act (CAA)

No intentionally added HAP substances.

16. Other information, including date of preparation or last revision**Issue date** 23-Mar-2015**Revision date** 01-Sep-2023**Version #** 19**Other information** This SDS was prepared in accordance with USA OSHA Hazard Communications regulation (29 CFR 1910.1200).**Disclaimer**

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.

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.

Explanation of abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
Acute Tox.	Acute toxicity
Aquatic Acute	Short-term (acute) aquatic hazard
Aquatic Chronic	Long-term (chronic) aquatic hazard
Asp. Tox.	Aspiration hazard
Carc.	Carcinogenicity
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)
Eye Dam.	Serious eye damage
Eye Irrit.	Eye Irritation
Flam. Liq.	Flammable liquids
Flam. Sol.	Flammable solids
Lact.	Effects on or via lactation
Muta.	Germ cell mutagenicity
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
Ox. Liq.	Oxidising liquids
Ozone	Hazardous to the ozone layer
PEL	Permissible Exposure Limit
Press. Gas	Gases under pressure
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
Repr.	Reproductive toxicity
Resp. Sens.	Respiratory sensitization
SARA	Superfund Amendments and Reauthorization Act of 1986
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STEL	Short-Term Exposure Limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act