




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. ***	
GHS product identifier	C4990Series	
Version #	12	
Issue date	02-Nov-2016	
Revision date	14-Jan-2021	
Supersedes date	06-Jun-2020	
CAS #	Mixture	
Recommended use	Inkjet printing	
Recommended Restrictions	Not available.	
Manufacturer	HP Deutschland GmbH Schickardstrasse 32 71034 Böblingen Germany	
HP Inc. health effect line (Toll-free within 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	

2. Hazards identification

GHS classification		
Physical hazards	Not classified.	
Health hazards	Reproductive toxicity (fertility, the unborn child)	Category 1B
Environmental hazards	Not classified.	
GHS label elements		
Signal word	Danger	
		
Hazard statement	May damage fertility or the unborn child.	
Precautionary statement		
Prevention	Wear protective gloves/protective clothing/eye protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.	
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.

3. Composition/information on ingredients

Components	CAS #	Percent
Water	7732-18-5	80-90
2-pyrrolidone	616-45-5	<10
Substituted naphthalenesulfonate salt	388616-20-4	<5
Trimethylolpropane	77-99-6	<5
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	126-86-3	<1
1,2-Benzisothiazolin-3-one	2634-33-5	<0.05

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.

4. First aid measures**First aid procedures****Inhalation**

Move to fresh air. If symptoms persist, get medical attention.

Skin

Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Eye

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 and effects, both acute and delayed

Not available.

Notes to physician

Not available.

5. Fire-fighting measures**Suitable extinguishing media**

CO2, water, dry chemical, or foam

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

Not available.

Protective equipment and precautions for firefighters

Not available.

Specific methods

None established.

6. Accidental release measures**Personal precautions**

Wear appropriate personal protective equipment.

Environmental precautions

Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for containment

Not available.

Methods for cleaning up

Soak up with inert absorbent material.

7. Handling and storage**Handling**

Avoid contact with skin, eyes and clothing.

Storage

Keep out of the reach of children. Keep away from excessive heat or cold.

8. Exposure controls / personal protection**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.

Recommended monitoring procedures

Not available.

Engineering controls

Use in a well ventilated area.
Provide adequate ventilation.

Personal protective equipment

Eye/face protection	Not available.
Skin protection	Use personal protective equipment to minimize exposure to skin and eye.
Respiratory protection	For use other than intended use (such as in the event of a large spill), goggles and respirators may be required.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Black.
Form	Liquid.
Odor	Not available.
Odor threshold	Not available.
pH	7.5 - 8
Melting point/Freezing point	Not available.
Boiling point	Not determined
Flash point	> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
Evaporation rate	Not determined
Flammability (solid, gas)	Not available.
Flammability limits in air, lower, % by volume	Not determined
Flammability limits in air, upper, % by volume	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.
VOC (Weight %)	< 86 g/l
Percent volatile	8 % estimated
Other data	
Oxidizing properties	Not determined

10. Stability and reactivity

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

Toxicological data

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
<u>Acute</u>		
Oral		
LD50	Rat	> 5000 mg/kg
Acute toxicity	Based on available data, the classification criteria are not met.	
Skin corrosion/irritation	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. Not classified as an irritant according to, OECD 405.	

Respiratory sensitizer	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
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

12. Ecological information

Ecotoxicological data

Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
Crustacea	EC50 Water flea (Daphnia pulex)	13.21 mg/l, 48 hours
Trimethylolpropane (CAS 77-99-6)		
Aquatic		
Crustacea	EC50 Daphnia	102, 48 Hours
Fish	LC50 Fish	1000, 96 Hours
Ecotoxicity	Information given is based on data on the components and the ecotoxicology of similar products	
Bioaccumulation		
Bioaccumulative potential		
Octanol/water partition coefficient log Kow		
2-pyrrolidone		-0.85
Aquatic toxicity	LC50/96h/Fathead minnows =>750mg/l EC50/48h/daphnia => 100mg/l, OECD 202 EC50/72h/algae => 100 mg/l , OECD 201	

13. Disposal considerations

Disposal methods	Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
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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.
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

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

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.

SDS sections updated 1. Product and Company Identification: Alternate Trade Names

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