SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

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. ***

1.1. Product identifier

Trade name or designation of the mixture C4931Series

Registration number -

Synonyms None.

Issue date 12-Jun-2015

Version number 16

Revision date 19-Mar-2021

Supersedes date 17-Feb-2021

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Inkjet printing

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

HP Inc UK Ltd, Regulatory Enquiries, Earley West
300 Thames Valley Park Drive, Reading, RG6 1PT

Telephone +44 20 7660 0596 (Consumer)
+44 20 7660 0403 (Commercial)

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

1.4 Emergency telephone number 0207771 5307

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

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.

Health hazards

Reproductive toxicity (fertility, the unborn child)	Category 1B	H360 - May damage fertility or the unborn child.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 2-methyl-2h-isothiazol-3-one, 2-pyrrolidone

Hazard pictograms

Signal word Danger

Hazard statements

H360 May damage fertility or the unborn child.

Precautionary statements

Prevention

P280	Wear protective gloves/protective clothing/eye protection.
P202	Do not handle until all safety precautions have been read and understood.
P201	Obtain special instructions before use.

Response

P308 + P313	IF exposed or concerned: Get medical advice/attention.

Storage

P405	Store locked up.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information Contains 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

2.3. Other hazards 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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Water	80-90	7732-18-5 231-791-2	-	-	
Classification: -					
2-pyrrolidone	<5	616-45-5 210-483-1	01-2119475471-37-XXXX	-	
Classification: Eye Irrit. 2;H319, Repr. 1B;H360					
2-methyl-2h-isothiazol-3-one	<0.1	2682-20-4 220-239-6	01-2120764690-50-XXXX	-	
Classification: Acute Tox. 3;H301, Acute Tox. 3;H311, Skin Corr. 1B;H314, Skin Sens. 1A;H317, Eye Dam. 1;H318, Acute Tox. 2;H330, Aquatic Acute 1;H400(M=10), Aquatic Chronic 1;H410					
1,2-Benzisothiazolin-3-one	<0.05	2634-33-5 220-120-9	01-2120761540-60-XXXX	613-088-00-6	
Classification: Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Dam. 1;H318, Aquatic Acute 1;H400(M=1)					

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.

SECTION 4: First aid measures

General information Not available.

4.1. Description of 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.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media None known.

5.2. Special hazards arising from the substance or mixture Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

Special fire fighting procedures Not available.

Specific methods None established.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Wear appropriate personal protective equipment.

For emergency responders Not available.

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

6.3. Methods and material 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.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities Keep out of the reach of children. Keep away from excessive heat or cold.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs)

Components	Type	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Consumers	Dermal	0.67 mg/kg bw/d	Systemic long term
		Inhalation	1.985 mg/m3	Systemic long term
		Oral	0.67 mg/kg bw/d	Systemic long term
	Workers	Dermal	4.2 mg/kg bw/d	Systemic long term
		Inhalation	29.62 mg/m3	Systemic long term

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
2-pyrrolidone (CAS 616-45-5)	Not applicable	Freshwater	0.5 mg/l	
		Intermittent	0.5 mg/l	Releases
		Marine water	0.05 mg/l	
		Sediment	0.4205 mg/kg	Freshwater
		Soil	0.0612 mg/kg	
		STP	10 mg/l	Sewage Treatment Plant

Exposure guidelines Exposure limits have not been established for this product.

8.2. Exposure controls

Appropriate engineering controls	Use in a well ventilated area. Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

General information	Not available.
Eye/face protection	Not required under intended use.
Skin protection	
- Hand protection	Not available.
- Other	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.
Thermal hazards	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic 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 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.
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.
Explosive properties	Not available.
Oxidizing properties	Not determined

9.2. Other information

VOC	< 143 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Not available.
10.5. Incompatible materials	Incompatible with strong bases and oxidizing agents.

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

SECTION 11: Toxicological information

General information Not available.

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 Not available.

11.1. Information on toxicological effects

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

Components	Species	Test Results
2-methyl-2h-isothiazol-3-one (CAS 2682-20-4)		
Acute		
Dermal		
LD50	Rat	242 mg/kg
Inhalation		
LC50	Rat	0.11 mg/l, 4 h
Oral		
LD50	Rat	120 mg/kg
2-pyrrolidone (CAS 616-45-5)		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg

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.

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.

Mixture versus substance information Not available.

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.

SECTION 12: Ecological information

12.1. Toxicity

Product		Species	Test Results
C4931Series			
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 750 mg/l, 96 hours

Components		Species	Test Results
2-methyl-2h-isothiazol-3-one (CAS 2682-20-4)			
Acute			
Other	EC50	Pseudokirchnerella subcapitata	0.138 - 0.22 mg/l, 120 h (OECD 201)
Chronic			
	NOEC	Pseudokirchneriella subcapitata	0.05 mg/l, 120 h (OECD 201)
Aquatic			
Acute			
Crustacea	EC50	Daphnia magna	1.6 mg/l, 48 h (OECD 202)
	LC50	Daphnia magna	0.934 mg/l, 48 h (OECD 202)
Fish	LC50	Oncorhynchus mykiss	4.77 mg/l, 96 h (OECD 203)
2-pyrrolidone (CAS 616-45-5)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	13.21 mg/l, 48 hours

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow)

2-pyrrolidone -0.85

Bioconcentration factor (BCF)

2-methyl-2h-isothiazol-3-one 48.1, Viscera (1972)
Species: Bluegill (Lepomis macrochirus)
5.75, Carcass (1972)
Species: Bluegill (Lepomis macrochirus)

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Not available.

EU waste code Not available.

Disposal methods/information Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Dispose of in compliance with federal, state, and local regulations.

SECTION 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.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorizations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other 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.
Other information	This Safety Data Sheet complies with the requirements of Regulation (EU) 2015/830. Classification according to Regulation (EC) No 1272/2008 as amended. Specific Provisions: Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (in the amended version OJ L 396 from 29.05.2007 page 3 with further rectifications and amendments).
National regulations	Not available.
15.2. Chemical safety assessment	See attached SUMI or GEIS document, if applicable.

SECTION 16: Other information

References	Regulation (EC) No. 1907/2006 of December 18, 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency (REACH). Regulation (EU) 2015/830 of May 28, 2015 amending Regulation (EC) No. 1907/2006. Regulation (EC) No. 1272/2008 of December 16, 2008 on classification, labeling and packaging of substances and mixtures, and amendments (CLP).
Information on evaluation method leading to the classification of mixture	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any H-statements not written out in full under Sections 2 to 15	H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H330 Fatal if inhaled. H360 May damage fertility or the unborn child. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Revision information	None.
Training information	Follow training instructions when handling this material.
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
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

Safe Use of Mixture Information (SUMI)

--

Water Based Ink: WB01 *English*

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product SDS, the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS.

The REACH registration number(s), where applicable, completes an extended product SDS.

Operational conditions

Maximum duration	Up to 8 hours per day
Frequency of exposure	< 240 days per year
Process conditions	Covers use at ambient temperatures. Adequate ventilation should be provide for the areas where printing is performed. ANSI/ASHRAE Standard 62.1-2013 provides guidelines to ensure acceptable air quality in the workspace. Avoid direct contact. Regular cleaning of equipment and work area. Supervision in place to check that Risk Management Measures are in place are being correctly used and Operational Conditions followed.

Risk management measures

Conditions and measures related to Personal Protection Equipment, hygiene and health evaluation	Wear safety glasses with side shields (or goggles), if splashing is possible. Wear appropriate chemical resistent gloves: see section 8 of the SDS. Wear appropriate chemical resistent clothing. In case of inadequate ventilation wear respiratory protection. Eye wash fountain and emergency showers are recommended. Avoid breathing mist/vapours. Avoid contact with skin, eyes and clothing. Training of workers in relation to proper use and maintenance of all Personal protection equipment (PPE) must be ensured.




Good practice advice

Use personal protective equipment as required.
Wash hands before breaks and after work.
Keep good industrial hygiene and safety practice.
Use only with adequate ventilation.
Do no eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.
Store at room temperature.


Environmental measures

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 appropriately licenced waste contractor.

Use descriptors

IS-Use at industrial sites
PW-Widespread use by professional workers
SU7-Printing and reproduction media
PC18-Inks and Toners
PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2-Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities
ERC5-Use at industrial site leading to inclusion into/onto article
ERC8c-Widespread use leading to inclusion into/onto article (indoor)

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture is provided.
Most of the water based inks are "not classified".
The classification of the mixture is based on the individuel ingredients and their concentration within the mixture.
All ingredients contributing to the classification are stated in Section 3 of the SDS.
Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.
The product may contain sensitizing ingredients that may cause allergic reaction to certain people.
Section 2 of the SDS states these ingredients where applicable.