




SAFETY DATA SHEET

1. Product 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 the chemical	5ZS58Series	
Other means of identification	None.	
Recommended use of the chemical and restrictions on use		
Recommended use	Inkjet printing	
Recommended restrictions	None known.	
Company identification	HP Taiwan Information Technology Ltd. 10F-2, No. 66 Jing Mao 2 Road Taipei, Taipei City, Taiwan 11568	
Telephone	886-2-8722-9000	
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

Hazard classification		
Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
Environmental hazards	Not classified.	
Label elements		
Symbols		
Signal word	Warning	
Hazard statement	May cause an allergic skin reaction.	
Precautionary statement		
Prevention	Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/mist/vapors. Contaminated work clothing should not be allowed out of the workplace.	
Response	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.	
Storage	Not available.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
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.	
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

Mixture

Chemical properties	CAS Number	Concentration (%)
Water	7732-18-5	75-85
1-amino-4-hydroxy-2-phenoxyanthraquinone	17418-58-5	<5
2-pyrrolidone	616-45-5	<1
Ethoxylated-2,4,7,9-tetramethyl-5-decyn-4,7-diol	9014-85-1	<1
1,2-Benzisothiazolin-3-one	2634-33-5	<0.05
2-methyl-2h-isothiazol-3-one	2682-20-4	<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 measures for different exposure routes

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 and effects	Not available.
Personal protection for first-aid responders	Not available.
Notes to physician	Not available.

5. Fire-fighting measures

Extinguishing media	Dry chemical, CO2, water spray or regular foam.
Extinguishing media to avoid	None known.
Specific hazards during fire fighting	None.
Special fire fighting procedures	None.
Protection of fire-fighters	None.
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.
Spill cleanup methods	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	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

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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Use personal protective equipment to minimize exposure to skin and eye.
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	Liquid.
Color	Magenta
Odor	Not available.
Odor threshold	Not available.
Melting point/freezing point	Not available.
pH	8.2
Boiling point, initial boiling point, and boiling range	Not available.
Flammability (solid, gas)	Not available.
Flash point	336.0 °F (168.9 °C)
Decomposition temperature	Not available.
Auto-ignition temperature	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Density	1.06 g/ml
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Evaporation rate	Not available.
Other data	
Oxidizing properties	Not determined
VOC	7.3 %

10. Stability and reactivity

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

Information on likely routes of exposure

Inhalation	Inhalation may result in mild irritation to the respiratory system.
Skin contact	May cause sensitization by skin contact.
Eye contact	Contact with eyes may result in mild irritation.
Ingestion	Ingestion is not a likely route of exposure.

Symptoms Not available.

Information on toxicological effects

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

Components	Species	Test Results
1,2-Benzisothiazolin-3-one (CAS 2634-33-5)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Oral		
LD50	Rat	490 mg/kg
2-methyl-2h-isothiazol-3-one (CAS 2682-20-4)		
Acute		
Dermal		
LD50	Rat	242 mg/kg
Inhalation		
LC50	Rat	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 or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	May cause sensitization by skin contact.	
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	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). Based on available data, the classification criteria are not met.	
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.	
Chronic effects	Not available.	
Other information	Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicity

Components	Species	Test Results
1,2-Benzisothiazolin-3-one (CAS 2634-33-5)		
Acute		
Other	EC50 Pseudokirchnerella subcapitata	70 - 150 µg/l, 72 h OECD (201)
Aquatic		
Acute		
Crustacea	EC50 Daphnia magna	2.9 mg/l, 48 h (OECD 202)
Fish	LC50 Oncorhynchus mykiss	2.15 mg/l, 96 h (OECD 203)
	Sheepshead minnow (Cyprinodon variegatus)	16.7 mg/l, 96 h EPA 540/9-85-006

Components	Species	Test Results
2-methyl-2h-isothiazol-3-one (CAS 2682-20-4)		
<i>Acute</i>		
Other	EC50	Pseudokirchnerella subcapitata
		0.138 - 0.22 mg/l, 120 h (OECD 201)
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna
	LC50	Daphnia magna
		1.6 mg/l, 48 h (OECD 202)
Fish	LC50	Oncorhynchus mykiss
		0.934 mg/l, 48 h (OECD 202)
		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
Persistence and degradability	Not available.	
Bioaccumulation		
Bioaccumulative potential		
Bioconcentration factor		
1,2-Benzisothiazolin-3-one		6.62, (OECD 305)
		Species: Bluegill (Lepomis macrochirus)
2-methyl-2h-isothiazol-3-one		48.1, Viscera (1972)
		Species: Bluegill (Lepomis macrochirus)
		5.75, Carcass (1972)
		Species: Bluegill (Lepomis macrochirus)
Octanol/water partition coefficient log Kow		
2-pyrrolidone		-0.85
Mobility in soil	Not available.	
Other hazardous effects	Not available.	

13. Disposal considerations

Disposal instructions	Do not dispose of together with general office waste. 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 an appropriately licensed waste contractor. 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 .
Residual waste	Not available.
Contaminated packaging	Not available.
Local disposal regulations	Not available.

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

Applicable regulations

Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste

Not listed.

Priority Management Chemical List (Regulations on Handling Priority Managed Chemicals), as amended

Not listed.

Toxic Chemical Substances (TCS) List (EPA Toxic Substances Notice No. 0960095331E, Tables 1-3, Dec. 17, 2007, as amended)

Not listed.

GHS Classification List: GHS implementation phase 1, 2 and 3 (CLA No. 0980145063, 0990146707, and 1020146801)

1,2-Benzisothiazolin-3-one (CAS 2634-33-5)
2-methyl-2h-isothiazol-3-one (CAS 2682-20-4)
2-pyrrolidone (CAS 616-45-5)

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.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information

References Not available.

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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