




1. Chemical 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 chemical (Product name)	2LL53Series
	HP Japan Inc. 4F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711
Poison Information Centre Telephone	0120-50-3024 (+81) 3 5749-8363
HP Inc. health effects line (Toll-free within the 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
Recommended use of the chemical and restrictions on use	
Intended use	Inkjet printing
Restrictions on use	Can only be used for printing on soft signage and promotional items. Should not be applied to clothing textiles.

2. Hazards identification

GHS classification	
Physical hazards	The product is not classified according to GHS.
Health hazards	Sensitization, skin Category 1
Environmental hazards	The product is not classified according to GHS.
GHS label elements	
Symbols	
Signal words	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	None.
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

Substance or mixture	Mixture	Gazette notification			
		CAS Number	ENCS no.	ISHL no.	Concentration (%)
Water		7732-18-5	(9)-447		75-80
Glycerol		56-81-5	(2)-242	(2)-242	<20
2-pyrrolidone		616-45-5	(5)-112	(5)-112	<2.5
Blue colorant		Proprietary	Proprietary	Proprietary	<2.5
Red colorant		Proprietary	Proprietary	Proprietary	<2.5
1,2-Benzisothiazolin-3-one (Benzisothiazolinone)		2634-33-5	(9)-1845	(9)-1845	<0.05
2-Methyl-2h-isothiazol-3-one (Methylisothiazolinone)		2682-20-4	(5)-5235	(5)-5235	<0.05

Chemical formula	H ₂ O (7732-18-5), C ₃ H ₈ O ₃ (56-81-5), C ₃ H ₈ O ₃ (56-81-5), C ₄ H ₇ N-O (616-45-5), C ₄ H ₇ N-O (616-45-5), C ₇ H ₅ NOS (2634-33-5), C ₇ H ₅ NOS (2634-33-5), C ₄ H ₅ NOS (2682-20-4)
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

If inhaled	Move to fresh air. If symptoms persist, get medical attention.
If on skin	Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.
If in eyes	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.
If swallowed	If ingestion of a large amount does occur, seek medical attention.

5. Fire-fighting measures

Extinguishing media	Dry chemical, CO ₂ , water spray or regular foam.
Extinguishing media to avoid	None known.
Specific methods	None established.

6. Accidental release measures

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

7. Handling and storage

Handling	
Technical measures (e.g. Local and general ventilation)	Not available.
Safe handling advice	Avoid contact with skin, eyes and clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Storage	
Safe storage conditions	Keep out of the reach of children. Keep away from excessive heat or cold.
Safe packaging materials	Not available.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Exposure guidelines	Exposure limits have not been established for this product.
Engineering measures	Use in a well ventilated area.
Personal protective equipment	
Respiratory protection	Not available.
Hand protection	Wear appropriate chemical resistant gloves.

Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Personal protective equipment	
Eye protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Use personal protective equipment to minimize exposure to skin and eye.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Black.
Odor	Not available.
pH	8.2
Melting point/Freezing point	Not available.
Boiling point, initial boiling point, and boiling range	Not available.
Flash point	336.0 °F (168.9 °C)

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.

Specific gravity 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 (Coefficient of viscosity) Not available.

Other information

Oxidizing properties Not determined

VOC 9.47 %

10. Stability and reactivity

Reactivity Not available.

Chemical 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

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

Components	Species	Test Results
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1,2-Benzisothiazolin-3-one (Benzisothiazolinone) (CAS 2634-33-5)

Acute

Dermal

LD50	Rat	> 2000 mg/kg
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Oral

LD50	Rat	490 mg/kg
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Components	Species	Test Results
2-Methyl-2h-isothiazol-3-one (Methylisothiazolinone) (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
Glycerol (CAS 56-81-5)		
Acute		
Dermal		
LD50	Guinea pig	45 ml/kg, Days
Inhalation		
<i>Vapor</i>		
LC50	Rat	4655 mg.min/l, 7 Hours
Oral		
LD50	Rat	18300 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	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.	
Other information	Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicological data

Components	Species	Test Results
1,2-Benzisothiazolin-3-one (Benzisothiazolinone) (CAS 2634-33-5)		
<i>Acute</i>		
Other	EC50	Pseudokirchnerella subcapitata
		70 - 150 µg/l, 72 h OECD (201)
Aquatic		
<i>Acute</i>		
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 (Methylisothiazolinone) (CAS 2682-20-4)			
<i>Acute</i>			
Other	EC50	Pseudokirchnerella subcapitata	0.138 - 0.22 mg/l, 120 h (OECD 201)
<i>Chronic</i>			
	NOEC	Pseudokirchneriella subcapitata	0.05 mg/l, 120 h (OECD 201)
Aquatic			
<i>Acute</i>			
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
Ecotoxicity	Not available.		
Persistence and degradability	Not available.		
Bioaccumulation	Not available.		
Bioaccumulative potential			
Bioconcentration factor			
1,2-Benzisothiazolin-3-one (Benzisothiazolinone)		6.62, (OECD 305)	Species: Bluegill (Lepomis macrochirus)
2-Methyl-2h-isothiazol-3-one (Methylisothiazolinone)		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	
Glycerol		-1.76	
Mobility in soil	Not available.		
Hazardous to the ozone layer	Not available.		

13. Disposal considerations

Local disposal regulations	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 .
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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.
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

Industrial Safety and Health Act

Notifiable substances

Not regulated.

Labeling substances

Not regulated.

Confirmed mutagens among the notified chemical substances

N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazol-2-yl)diazenyl]aniline

N,N-diethyl-3-methyl-4-[(5-nitro-1,3-thiazole-2-yl)diazenyl]aniline

Poisonous and Deleterious Substances Control Act

Specified poisonous substances

Not regulated.

Poisonous substances

Not regulated.

Deleterious substances

Not regulated.

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Class I specified chemical substances

Not regulated.

Class II specified chemical substances

Not regulated.

Monitoring chemical substances

Not regulated.

Priority Assessment Chemical Substances (PACs)

Not regulated.

Reporting Exempted Substances

1,2,3-Propanetriol

Law concerning Pollutant Release and Transfer Register

Specified class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 1 substances (substance name, ordinance number and content)

Not regulated.

Class 2 substances (substance name, ordinance number and content)

Not regulated.

Ship Safety Law, Dangerous Goods Marine Transport and Storage Rule Not regulated.

Air Law, Enforcement Rule Not regulated.

Explosives Control Act

Not regulated.

Act on Prevention of Marine Pollution and Maritime Disaster

WATER

Category: Other Substances

GLYCEROL

Category: Z

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

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.

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