



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	4UV88Series
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	Not classified.
Environmental hazards	Not classified.
Label elements	
Symbols	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.
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	CAS Number	Concentration (%)
Chemical properties		
Water	7732-18-5	60-80
1,2-butanediol	584-03-2	<20

	CAS Number	Concentration (%)
2-pyrrolidone	616-45-5	<3

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.
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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	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.

Under extreme work place conditions, ink vapors may condense outside of the printing system. The Waste Profile Datasheet for your printer at <https://hpllatexknowledgecenter.com/applications/wasteprofiles> contains more information on how to properly handle and dispose of the condensate.

9. Physical and chemical properties**Appearance**

Physical state	Liquid.
Form	Not available.
Color	Light Cyan
Odor	Not available.
Odor threshold	Not available.
Melting point/freezing point	Not available.
pH	8.4
Boiling point, initial boiling point, and boiling range	Not available.
Flammability (solid, gas)	Not available.
Flash point	343.0 °F (172.8 °C) Pensky-Martens Closed Cup
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	1.03 g/cm ³
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Evaporation rate	Not available.
Other data	
Oxidizing properties	Not determined
VOC	< 237 g/l EPA method 24

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	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.

Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.	
Components	Species	Test Results
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	Not classified as an irritant according to, OECD 405.	
Respiratory or skin sensitization		
Respiratory sensitization	Based on available data, the classification criteria are not met.	
Skin sensitization	Non-sensitizer- Local Lymph Node Assay (OECD 429).	
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.	
Chronic effects	Not available.	
Other information	Refer to Section 2 for potential health effects and Section 4 for first aid measures. Complete toxicity data are not available for this specific formulation	

12. Ecological information

Ecotoxicity		
Components	Species	Test Results
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		
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)

2-pyrrolidone (CAS 616-45-5)

International regulations

The components of this product are reported in the following inventories: United States of America, European Union, Switzerland, Canada, Australia and New Zealand.

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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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