



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)	3ED51Series
	HP Japan Inc. 5F Ojima2-2-1 Koto-ku Tokyo, Japan 136-8711
Poison Information Centre Telephone	0120-50-3024 (+81) 3 5628-1101
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

2. Hazards identification

GHS classification	The product is not classified according to GHS.
GHS label elements	
Symbols	None.
Signal words	None.
Hazard statement	None.
Precautionary statement	
Prevention	None.
Response	None.
Storage	None.
Disposal	None.
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. Carbon black is classified by the IARC as a Group 2B carcinogen (the substance is possibly carcinogenic to humans). Carbon black in this preparation, due to its bound form, does not present this carcinogenic risk. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.
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			
Components	CAS Number	ENCS no.	ISHL no.	Concentration (%)
Water	7732-18-5	(9)-447		70-80

	Gazette notification			Concentration (%)
	CAS Number	ENCS no.	ISHL no.	
Hydroxy alkylated lactam	Proprietary	Proprietary	Proprietary	<15
Substituted diol	Proprietary	Proprietary	Proprietary	<7.5
Modified carbon black 11	Proprietary	Proprietary	Proprietary	<5.0
2-pyrrolidone	616-45-5	(5)-112	(5)-112	<3.0

Chemical formula H₂O (7732-18-5), C₄-H₇-N-O (616-45-5), C₄-H₇-N-O (616-45-5)

Composition comments This ink supply contains an aqueous ink formulation.

Carbon black is present only in a bound form in this preparation. 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. If irritation persists get medical attention.
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	CO ₂ , water, dry chemical, or 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	Not available.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Personal protective equipment	
Eye protection	Not available.
Skin and body protection	Use personal protective equipment to minimize exposure to skin and eye.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Color Black.

Odor Not available.

pH 9.2

Melting point/Freezing point Not available.

Boiling point, initial boiling point, and boiling range Not determined

Flash point > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not determined

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not determined

Vapor density > 1 (air=1)

Evaporation rate Not determined

Specific gravity 1 - 1.1

Solubility(ies)

Solubility (water) Soluble in water

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not determined

Decomposition temperature Not available.

Viscosity (Coefficient of viscosity) Not available.

Other information

Oxidizing properties Not determined

VOC < 240 g/l

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. hydrogen fluoride, fluorinated hydrocarbons

11. Toxicological information

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.
Non irritant in rabbit (OECD 404)

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 or skin sensitization

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.

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation. None of the other ingredients in this preparation are classified as carcinogens according to ACGIH, EU, IARC, MAK, NTP or OSHA.

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
 Refer to Section 2 for potential health effects and Section 4 for first aid measures.

12. Ecological information

Aquatic toxicity Not expected to be harmful to aquatic organisms.

Ecotoxicological data

Product	Species	Test Results
3ED51Series		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 750 mg/l, 96 hours
Components	Species	Test Results
2-pyrrolidone (CAS 616-45-5)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>) 13.21 mg/l, 48 hours
Ecotoxicity		Not available.
Persistence and degradability		Not available.
Bioaccumulation		Not available.
Bioaccumulative potential		
Octanol/water partition coefficient log Kow		
2-pyrrolidone		-0.85
Mobility in soil		Not available.
Hazardous to the ozone layer		Not available.

13. Disposal considerations

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

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>.

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.

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

Not regulated.

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.

Fire Service Act Not dangerous goods under Fire Service Law**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

Substituted diol

Category: Z

Substituted diol

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.

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.

Revision information

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